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ABSTRACT

Financed with ESEA Title III funds since 1970, the School Information System (SIS) was designed essentially to furnish school administrators with data and information with which to make better decisions. The basic means were to (1) build and improve a data bank, (2) prepare and disseminate computerized reports to the decisionmakers--especially school principals, and (3) train them to understand and ultimately to use the reports in their managemet of schools. By the end of the third year, 96 principals of the 98 total, in response to a survey, reported they understood SIS reports "rather well" or "very well," while a consistent majority said they used the reports at least monthly for at least six different functions. In addition, the reports turned out to have considerable appeal to community, parent groups, central office personnel--as well as for the principals and assistant principals. Perhaps most indicative, a major part of project costs were picked up by local funds after the Title III grant expired in April of 1973. (Pages 33-42, and 1-3 of Appendix C may reproduce poorly.) (Author)

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Project Termination Report (PTR)

School Management and Evaluation System

P. L. 89-10, Title III

Project Number

45-70-010-3

May 4, 1973

Board of Education
of the
City School District
of the
City of Cincinnati

EA 005 709

School Management and Evaluation System

Project #45-70-010

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SUBMIT IN TRIPLICATE

OHIO DEPARTMENT OF EDUCATION

1

ESEA TITLE III
781 Northwest Boulevard
Columbus, Ohio 43212

BASIC DATA FORM 2

Due Date: August 1 or ninety (90) days following grant termination, whichever occurs first

SECTION A – GENERAL INFORMATION

PROJECT TITLE	PROJECT NUMBER
School Management and Evaluation System "School Information System"	45-70-010-3

Applicant Agency	Address (complete)	
The Board of Education of the City School District of the City of Cincinnati, Ohio	Cincinnati Public Schools 230 East Ninth Street Cincinnati, Ohio 45202 County Hamilton	
Name of Project Director Bernard M. Barbadora Joseph L. Felix James N. Jacobs	Address (complete) 230 East Ninth Street Cincinnati, Ohio 45202	Telephone Number 621-7010 Ext. 458 Area Code 513
Superintendent Donald R. Waldrip	Address (complete) 230 East Ninth Street Cincinnati, Ohio 45202	Telephone Number 621-7010 Ext. 200 Area Code 513
Signature of Superintendent Donald R. Waldrip		Date April 30, 1973

SECTION B – SCHOOL POPULATION AND PARTICIPATION DATA

Enrollment Data on or Near the Previous October 1		Number of Children: Pre-Kinder-Garten	Kinder-Garten	Grades 1-6	Grades 7-12	Adults	Staff Receiving Inservice Training	Total
1. Total Enrollment of School District(s) Served by Title III Project	Public	200	6,100	38,600	34,300			79,200
	Nonpublic	50	350	10,700	16,700			22,800
2. Total Enrollment of Schools Served by Title III Project	Public		6,100	38,600	34,300			79,000
	Nonpublic							
3. Persons Directly Participating in the Title III Project	Public			3	5		250	258
	Nonpublic							

4. Direct and Indirect Participation of Students, Teachers and Counselors

Type of School	Direct Participation: Teachers Elementary	Teachers Secondary	Counselors Elementary	Counselors Secondary	Indirect Participation: Teachers Elementary	Teachers Secondary	Counselors Elementary	Counselors Secondary	Students Elementary	Students Secondary
Public *	3	3	2	2	2,000	1,000	0	0	44,697	34,295
Nonpublic										

BD 2-1

* Plus 350 Administrators

SECTION C – ETHNIC, TARGET POPULATION, AND RURAL/URBAN PARTICIPATION

1. PARTICIPANTS REPORTED IN B-3, PREKINDERGARTEN THROUGH ADULT BY ETHNIC GROUPS	Negro American	Indian American	Oriental American	Spanish surnamed American (Mexican, Puerto Rican, Cuban descent)	Caucasian	Other
Number of Participants	2				6	
Percent of Participants	20%				80%	

2. PARTICIPANTS REPORTED IN B-3, PREKINDERGARTEN THROUGH ADULT BY TARGET POPULATION	Migrants	Disadvantaged	Handicapped	Early Childhood Education	Other–Specify	
Number of Participants						

3. PARTICIPANTS REPORTED IN B-3, PREKINDERGARTEN THROUGH ADULT BY RURAL/URBAN DISTRIBUTION	Rural		Standard Metropolitan Area		Other Urban	
	Farm	Nonfarm	Low Socioeconomic Area	Other	Low Socioeconomic Area	Other
Percent of Total Number Served			16	84		

SECTION D – PERSONNEL FOR ADMINISTRATION AND IMPLEMENTATION OF PROJECT

Type of Paid Personnel	Project Staff Paid with Title III Funds				Project Staff Not Paid with Title III Funds and Volunteers			
	Full Time	Part Time		Full Time Equivalent	Full Time	Part Time		Full Time Equivalent
		Half or greater	Less than half			Half or greater	Less than half	
1. Administration/Supervision	1			1.0			2	.50
2. Teachers								
a. prekindergarten								
b. kindergarten								
c. grades 1-6								
d. grades 7-12								
e. other								
3. Subject matter specialists (Artists, scientists, etc. other than regular teachers)								
4. Technicians (audiovisual, etc.)	1	2		2.6				
5. Pupil personnel workers (Guidance, counseling, testing, attendance and school social work)								
6. Health services personnel (Medical, dental, psychiatric)								
7. Researchers and evaluators			1	.25				
8. Planners and developers								
9. Disseminators (writers, public relation personnel, etc.)			1	.25				
10. Other professionals								
11. Paraprofessionals (education aides, etc.)								
12. Other nonprofessionals (clerical, pupil transportation food services, etc.)	1		1	1.45				

SECTION E – PERSONS SERVED BY TITLE III PROJECT AND ESTIMATED COST									COMPLETE ONLY IF PROJECT HAS TERMINATED
MAJOR PROGRAMS OR SERVICES	Number of pupils by grade level (public and nonpublic schools)				Number of nonpublic school pupils	Number of adults (exclude staff receiving training and project staff members)	Number of staff who received inservice training	Total estimated cost	Indicate per cent of each program or service that is being continued without Federal Funds
	Pre-Kindergarten	Kindergarten	Grades 1-6	Grades 7-12					
A. Direct educative services (Teaching and aiding teaching)									
1. Basic skills									
a. Remedial									
1) English language arts (except reading)									
2) Reading									
3) Cultural									
4) Social sciences/social studies									
5) Natural science and mathematics									
6) Other – specify									
b. Nonremedial (regular) & enrichment									
1) English language arts (except reading)									
2) Reading									
3) Cultural									
(a) Foreign languages (classical & modern)									
(b) Arts (music, theater, etc.)									
4) Social sciences/ social studies									
5) Natural sciences and mathematics									
6) Other – specify									
B. Special education									
1. Handicapped									
2. Gifted									
C. Supporting services 1. General administration									
a. Information dissemination		6,100	38,600	34,300			350	45,000	100%
b. Other								5,000	100%
2. Instructional administration									
a. School wide direction and management									

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SECTION E – PERSONS SERVED BY TITLE III PROJECT AND ESTIMATED COST (Continued)

MAJOR PROGRAMS OR SERVICES	Number of pupils by grade level (public and nonpublic schools)				Number of nonpublic School pupils	Number of adults (exclude staff receiving training and project staff members)	Number of staff who received inservice training	Total estimated cost	COMPLETE ONLY IF PROJECT HAS TERMINATED
	Pre-Kindergarten	Kindergarten	Grades 1-6	Grades 7-12					Indicate per cent of each program or service that is being continued without Federal Funds
b. System wide direction and management									
c. Instructional supervision									
3. Program development									
a. Research & development				8			350	15,000	80%
b. Planning				8			350	7,000	95%
c. Evaluation				8			350	15,000	100%
d. Demonstration									
4. Personnel development									
5. School library resources and other instructional material (except equipment)									
a. Audiovisual materials									
b. Books, periodicals and other printed materials (except textbooks)									
6. School library, audiovisual & other media personnel									
7. Pupil services									
a. Guidance and counseling									
b. Testing									
c. School psychological services									
d. Attendance & school social work									
e. Health services									
f. Pupil transportation									
8. Capital outlay									
a. Sites and buildings									
b. Equipment									
1) Audiovisual									
2) Other instructional equipment									
3) Noninstructional equipment									
D. Improving classroom instruction: flexible scheduling, individual instruction, etc.									
E. Community service or participation						40,000		5,000	100%

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BD 2-4

SECTION F - REPLICATION OF ESEA TITLE III PROJECT BY OTHER SCHOOL DISTRICTS

According to your best information, list the name and location of school districts which have replicated to some degree components of the ESEA Title III project reported on this form. (Add additional lines if necessary).

NAME	LOCATION
Mr. Darwin Keye, Secondary Coordinator	Mt. Healthy City Schools, 1743 Adams Road, Mt. Healthy, Ohio 45231

SCHOOL MANAGEMENT AND EVALUATION SYSTEM

II. A. Summary

This Project, funded for three years under ESEA Title III, has had three fundamental and largely sequential objectives: To develop and implement an information system on the school level, to improve the system, and to help educational decision-makers understand and ultimately use the system. The targetted audiences were, of course the educational decision-makers--primarily school principals and secondarily central office administrators plus supervisors. Not surprisingly, many other groups and individuals turned out to be served too.

The proposal for the Project arose in the late 1960's when alert District personnel started to seek relatively objective and varied data to support the overall decision process. This effort culminated in the proposal, submitted in early 1970.

Basic procedures under each of the three aforesaid objectives can be listed rather simply. In developing the information system, the Project staff assessed the informational needs of their various target groups, designed a model of the eventual system, collected and generated data, prepared the data for analysis and output by computer, processed and de-bugged the resulting printouts or reports (on each of 100 District schools), wrote interpretive memorandums to accompany and clarify the reports, and distributed all this to the intended audience. In improving the system, more or less all the procedures under the first objective were scrutinized and replicated. Finally, in training decision-makers to understand and use the system, the emphasis shifted (a) initially to feedback from decision-makers and others on how the reports were being received, and (b) ultimately to a series of in-service programs for system users.

Evaluation for the first objective was largely a matter of face validity; i.e., was the information system being developed as it had been proposed. Evaluating the second and third objectives, on the other hand, consisted for the most part of surveying the report users to see if, in fact, improvements had been made and if the reports were proving useful.

Results of the various evaluations were predominantly favorable. The most tangible evidence of this was the fact that the Cincinnati Board of Education has decided to continue the Project under local funds--despite exceptional tightness in the LEA budget for the past five years.

II. B. Context Description

By 1968, the Cincinnati Public Schools had developed a keen interest in building a data bank--primarily for the sake of improving program administration evaluation. But local funding had been very tight for the School District throughout the late 1960's. So the District's Division of Program Research and Design, under the direction of James Jacobs, sought and gained limited financial support through Title I of the Elementary and Secondary Education Act (ESEA) and through the Disadvantaged Pupils Public Fund (DPPF) for the State of Ohio.

This effort culminated in the hiring of two experienced District people in early 1968 to start collecting elementary school data. The two professionals collected whatever data they learned was available, outside agencies were hired to prepare and process this data, and the resulting computer printouts were disseminated to all elementary principals in the Cincinnati Public Schools.

An essential need justifying this effort was identified at the time and has remained basically unchanged to the present--namely, to provide more meaningful data to decision-makers and thereby aid them in their daily and long-term decision-making tasks. A second need, perhaps no less important, was to provide persuasive evidence for what is done in the Cincinnati Public Schools. This need today is commonly referred to as accountability to the public. According to a late 1970 Gallup poll, two of three adults nationwide favor increased accountability for teachers and school administrators.

As the data bank became more than embryonic, the people involved all recognized the desirability of gaining more substantial support. In April of 1970, a formal proposal was submitted to Title III of ESEA. The proposal title was School Management and Evaluation System (SMES), since it pointed at school-level information to help management in its decision-making and evaluation of programs--via a system approach. By May of 1970, word was received that the proposal was to be funded.

II. C. Program Explanation

Scope Of The Program

1. Number and Kinds of Participants

   Broadly speaking, the School Information System served the Cincinnati Public Schools as a whole. More specifically, there were several identifiable populations served in varying ways. Primary service was provided to

the 100 school principals in the District. Secondary attention was directed to the 65 assistant principals and the diversity of District administrators and specialists on up to the superintendent--numbering around 140.

Direct services to the above groups, typically with multi-school responsibilities, inevitably meant at least indirect service to the classroom teachers (some 3,400) and to the students (roughly 77,000) District-wide. In another sense, all the teachers and three entire grades (i.e., 6th, 9th, and 12th) of students expressed themselves to the Project via the teacher and student surveys.

A tertiary target group has been lay community people (of a large but indeterminate number) who have used SIS reports or attended project-oriented meetings. Prominent in this group have been parents. Among several forms of participation, large samples of the parent population have taken the parent survey and thus become part of the Project's data bank.

2. Specified Objectives

As stated in the section of evaluation, these were (a) development of a system's model to meet ascertained management needs, (b) collection of recorded data, (c) generation of survey data, (d) analysis of data, (e) interpretation of data, (f) preparation of data reports, (g) report evaluation, (h) report dissemination, (i) training for decision-makers to understand and use reports, and (j) evaluation of user training.

3. Staff Responsibilities, Qualifications, Etc.

The staff throughout the life of the Project has included a manager, a programmer/analyst, a disseminator/evaluator, and a secretary. In addition, for at least half of the three years, there has been a data collector, a statistical clerk, and two other programmer/analysts.

Duties of the staff were rather well described by the titles given above. The project manager coordinated and directed the work of the entire staff; the programmer/analysts developed and de-bugged report software; the disseminator/evaluator had a hand in most of the narrative products beside covering most process evaluation and some product evaluation; the data collector picked up data from a number of offices inside and outside the District; the statistical clerk lent able assistance to the col-

lector; and the secretary scrambled to keep up with the variety of assignments from her half-dozen "bosses."

How devoted to these duties were the incumbents? For the first project year, all staff were full-time. Afterward, however, the need for programmers was acknowledged and two programmers were added. But the budget for the second and third years had to be kept down, so only the manager and secretary remained full-time over the entire three years. For instance, the disseminator-evaluator was cut to half-time after the first year and the data collector's time was even less. It might be noted here that the programmers, because of their rather low priority to the hardware available to them, frequently had to work odd hours (especially between midnight and 8 a.m.) in order to gain respectable turnaround time between computer runs.

Something should be stated about qualification of the staff. The project manager had completed coursework for a doctorate in educational research, management, and evaluation at Ohio State University. One programmer/analyst had a background in accounting and business applications, while the other two had been trained in mathematics. The data collector drew from long experience in the District as a teacher and school principal. The disseminator/evaluator was a former journalist and teacher before completing a doctorate in school administration and communications. The clerk and secretary were both highly qualified for their positions under civil service requirements.

All of the professional staff has several occasions for upgrading their job skills. These occurred by and large in the form of outside counsultants for (a) the project manager; e.g., Professor Desmond Cook, Ohio State University, on management; Professor Edwin Novak, Ohio State University, on systems design; and Dr. Jack Bieda, Procter and Gamble, on statistics; and for (b) the programmer/analysts; e.g., Dr. James Gunnell, Ohio State University, on surveys; and Dean Harry Smith, Rensselaer Polytechnic Institute, on statistical applications and report formatting. The disseminator/evaluator, on the other hand, took advantage of several in-service seminars and workshops designed for District evaluators.

Regarding staff stability, it was complete except for the secretary. The average tenure there was one

year. Fortunately, when budgetary constraints forced several positions onto less than full-time, the departmental home of the Project helped maintain people under other budgets.

Program Procedures

1. Time Period and Report Coverage

The School Information System ran from May 1, 1970, through April 30, 1973. This report centered on the third year of the three-year endeavor but sought to embrace essentials for all three years.

2. Location and Arrangements

It was estimated that some sixty percent of project procedures took place on the Third Floor of the Education Center for the Cincinnati Public Schools--within the District's Department of Research and Development. The remaining forty percent was divided about equally between more than half the District's 100 schools and four computer installations; i.e., Hamilton County Data Processing Center, University of Cincinnati Computer Center, Regional Computer Center for Hamilton County, and the District's own Division of Data Processing. Project staffers were provided two and a half rooms for offices and storage in the Education Center, while their accommodation in the field was strictly transient.

3. Main Services and Methods

As stated elsewhere, the culminating service of SIS was to produce highly useful data reports to District decision-makers. In broad terms this was accomplished by first developing and upgrading a rather comprehensive information system (for the first two years) and then training the decision-makers to understand and use the system effectively (during the third year).

It should be made clear that project reports, the basic product of the Information System, feature (1) the statistical techniques of correlation, regression and factor analysis, (2) a survey component undergirded by pilot tests and periodic revisions of the instruments, massive respondent populations as totalities or as random samples, standardization of instructions and general procedures for administration, processing via computer, reliability testing, and a series of validity

checks, as well as (3) accompaniment for all ten reports by interpretive memorandums to aid users toward thorough understanding of contents. Substantial documentation of these features was avilable in the CGA for 1972.

Infrastructure for all the above was an automated data bank. This has meant, for example, that any or all of the several hundred thousand variables--loaded onto disks--can be accessed directly from teletype terminals at no less than eight locations around the District. Thus, in addition to the regular reports produced for all 100 schools, a system user can quickly receive a report tailored to his exact specifications.

5. The Role of Lay People

As stated elsewhere, local communities and parents interested in the public schools have made extensive use of project materials. Evidence of this has been more than a hundred school-community meetings focusing on SIS reports. These have been mandated district-wide at least once a year to inform communities about school affairs, while supplementary meetings have been scheduled at the discretion of individual schools. Another common mode of contact has been requests by phone. Dozens of these have been received. Related discussion is given in the section on dissemination.

A very different but equally emphatic role for lay people has been their inclusion on four survey advisory committees. Three or more community representatives have participated on each of these. The major responsibility of the committees has been to recommend changes in survey content and in how results are presented to communities. Finally, moving from depth to breadth of involvement, the Project has maintained a rather steady flow of general publicity with articles in newspapers, District newsletters, and SIS's own newsletter.

6. Financial Considerations

The total cost of the Project was $293,000 for three years. Of this amount, $267,000 or ninety-one percent was provided under ESEA Title III. The remaining $26,000 was a very conservative estimate of support from several other sources: The Hamilton County Data Processing Center which gave the Project a strikingly low price for the use of its hardware; the Hewlett Packard Company which did the same with its computer

terminals; ESEA Title I contributed occasional time slots from non-project personnel; and, of course, the LEA provided basic facilities plus, quite recently, substantial help processing the very large parent survey.

The cost of continuing the Project beyond its Title III period--essentially at the same level of "production"--was expected to drop about twenty-five percent. This economy was largely explained by the elimination of a programmer/analyst, since the preponderance of software had been developed by that time.

Major categories of cost were roundly estimated as follows: computer processing (software as well as hardware) -- $100,000; dissemination -- $75,000; administration -- $50,000; and evaluation -- $25,000. Like most projects in education, the bulk of the money went for professional personnel. However, with its emphasis on computerized reporting, the School Information System spent a sizeable amount on computer usage as well as duplication and clerical services. The brief list below is given in accordance with state guidelines.

Total Federal Support Under ESEA Title III	$ 267,100
Total Federal Support Other Than Under ESEA Title III	$ 1,000
Total Non-Federal Support	$ 25,000
Total Project Cost	$ 293,100
Total Evaluation Cost	$ 25,000

7. Evaluation Provisions and Impact

Considerable detail in this regard has been supplied in the lengthy section on evaluation. Suffice here to mention the following. Approximately twenty percent of the disseminator/evaluator's total assignment focused on evaluation while the head of project evaluation for the District spent several weeks during the third year alone coordinating appraisals of the two major training programs for SIS users.

Target populations were in a sense employed as evaluators too, since their reaction to project products was surveyed on several occasions. Incidentally, this survey effort not only embodied the preparation and administration of formal written instruments for there were many informal oral contacts between staffers and users. The project manager judged that more than one hour weekly on the average was given to this unstructured activity.

In terms of impact, evaluation efforts as a whole were instrumental in several fundamental areas: (a) structuring and restructuring the noted training programs, (b) modifying and sharpening staff assignments from year to year, and (c) repeatedly revising report formats for greater understandability and utility.

Effect Of Project On Cooperating Agencies

A number of agencies and organizations have been named in previous sections. But only those with whom SIS has or has had a mutual relationship will be included below--along with some organizations yet unnamed.

A. Bureau of Educational Research, University of Virginia (Charlottesville): SIS has used the Bureau's hardware and software for statistical work, while the Bureau has benefitted from our theoretical models in order to develop a district-level information system for the State of Virginia. (Second year of Project.)

B. Center for Urban Information Systems at the University of Cincinnati: This organization has produced a number of batch processed reports and has interacted frequently with the staff's programmer/analysts. In fact, the Center has served as the Project's interface with the University's Computer Center. Moreover, the respective data banks of the Center and SIS have been shared rather extensively. (Second year of Project.)

C. City Planning Commission of Cincinnati: This office provided the Project with detailed maps on the city for the later purpose of matching census tracts with school attendance areas. We have provided them with data on juvenile arrests, dropouts, attendance, and the student survey. (First, second, and third years of Project.)

D. Educational Development Faculty at the Ohio State University: This relationship has meant consultation on conceptualizing the project in a resource allocation mode, assistance in developing the evaluation model, and considerable help in carrying out the "maverick" study which identified and analyzed over- and under-achieving schools. SIS, of course, provided one of their doctoral students with all the data to be analyzed. (First and second year of Project.)

E. Data Processing Center of the Hamilton County Board of Education: The essence here was the financial support given to this center in return for the very advantageous arrangement for CPU time. (First, second, and third year of Project.)

F. Data Systems Design and Management Science Departments of the Procter and Gamble Company: The company has released a person to serve on the Project's Committee A.

This systems specialist has had frequent mutually beneficial interactions with the programmer/analyst. The company has also offered help in drawing lay samples in the school district, although this offer is being accepted for the first time for the next parent survey. (Second year of Project.)

G. Hewlett Packard: This developer of hardware and software packages has made its local system available to SIS while SIS in its turn is testing the system for its hardware utility. (Third year of Project.)

H. Parent Teacher Associations: SIS has provided the PTAs with reports and spoken at several of their meetings. For this part, literally hundreds of PTA members have volunteered generous amounts of their time for survey work--especially phoning lay respondents. (First, second, and third years of Project.)

I. Local Educational Agencies: The Mt. Healthy School District in Cincinnati has used all of SIS's surveys as well as the programming software to process the data. (Third year of Project.)

J. Model Cities: Model Cities has used our instruments as well as our data in carrying out their evaluation studies. (First and second years of Project.)

K. School Community Associations (SCA): They have used our data as well as our survey data extensively. Specific uses include--planning and evaluation at the local elementary, junior, and senior high schools. (First, second, and third years of Project.)

Organizations with whom the Project has exchanged services in the past but not within the last year include the Radio Corporation of America and the Regional Computer Center for Cincinnati and Hamilton County.

II. D. Evaluation Of Activities And Outcomes

First, a caveat is in order regarding "the matter in which all persons receiving treatment were chosen" and "the significant characteristics of those participants" (from the State Department's Instructions). The Project's closest approximation of participants "receiving treatment" has been district principals--and possibly assistant principals, central office supervisors, directors, and top administrators--who received <u>training</u> to improve their understanding and use of project reports. So the items quoted above were not matters

of real concern for the School Information System. Indeed, the highly unusual thrust of the entire project made many standard evaluation procedures inappropriate as will be seen below.

1. Objectives (Referring notably to the third and fourth aspects under "Evaluation of Activities and Outcomes")

These remained almost perfectly stable over the three-year period. A gradually shifting personal preference of project management has led to slight changes in the actual wording of a few objectives, but the perception of the essential charge has been remarkably constant. With the benefit of a three-year perspective, the fundamental objectives have been reduced to three in number. What were formerly part of a longer list have been classified as sub-objectives, since they could be neatly subsumed. Now each of the "big three" will be considered more closely--with particular attention to levels of accomplishment and means of measurement.

Objective I -- The Development Of A School Information System

This was the overarching charge of the project's first two years. So its accomplishment has been discussed with some detail in the first and second Applications for Continuation Grant (see, for example, pp. 11-37 in the 1972 Application). As review, the major steps of that discussion were (a) development of a system's model to meet identified management needs, (b) collection of recorded data, (c) generation of survey data, (d) analysis of data, (e) interpretation of data, (f) preparation of data reports, and (g) dissemination of reports.

The technique used in measuring the accomplishment of these various steps was primarily face validity. In effect, was the information system developed? Appendix H in the 1972 CGA provided a reproduction of a Variable Printout, the Project's most comprehensive computer-based report. The Variable Printout embodied the entire system rather well, because it represented collection and generation of several hundred variables, presentation of data in various forms (i.e., absolute numbers, percents, averages, and standard deviations), and dissemination--along with interpretive memorandums--to all regular district schools. In fact, at the time of this writing, the Project distributed no less than ten distinct reports to the same 100 schools. One-page samples of each have been reproduced in Appendix A.

In addition to face validity checks on the accomplishment of the first objective, the project staff (1) scrutinized their own basic procedures in data collection, (2) spot-checked data output, (3) pilot-tested the surveys, (4) searched the literature on data analysis, (5) encouraged reaction from a half-dozen consultants, and (6) surveyed school principals -- the major target group for

the Project. These assessment were discussed in the second CGA, especially on pp. 12-13, 16, 19, and 25-37. While the evaluative data gathered was not wholly complimentary, it did amount to unequivocal evidence that the Project had definitely developed a school information system with its several ramifications as specified by objectives one through four in the original proposal (see pp. 4-5).

Objective II -- Improving The System

In broad terms, this was the fundamental charge for the Project's second year. This is not to state that developmental work stopped or that user training had not started, for there was temporal overlap among the three areas of endeavor.

Moreover, this second objective grew directly out of the first. For as development occurred, each step was soon persued for possible improvement. Therefore, evaluation of this objective has been partly covered under objective I. Efforts in this regard were elaborated in the second CGA. Suffice here to touch upon a few of the most important ones.

Compatibility of SIS data with that from other offices became a major concern during the second year. In one case, SIS had been computing district averages by using the number of schools and not accounting for their varying student populations. This turned out to be incompatible with figures computed by the Division of Evaluation Services; and, since the latter figures were really better, we dropped ours and adopted theirs.

As for the survey component of the data bank, a carefully chosen committee was put together for the primary purpose of survey improvement. One result was a painstaking revision of both the student and teacher surveys. As noted under Objective I, a handful of consultants also inputed on the surveys.

Numerous improvements were made on the format of the various project reports. Potentially mysterious abbreviations were clarified, stanine rankings were made more flexible and realistic, most variables were denoted as desirable or undesirable--for more meaning and utility to users, and factor structures were strengthened (CGA 1972, pp. 29-30). Evaluation of these changes resided for the most part in a survey of the school principals; results of this survey were recounted on pp. 31-34.

But probably the most noteworthy improvement had to do with automation and conversion. More specifically, the system's data bank was essentially automated on an IBM 360-40 by the middle of the second year. Then, with the District's acquisition of a Hewlett Packard 2000 C

system early in the third year, it was decided to convert the SIS bank accordingly.

The programming task has been considerable and has included packages for correlation, regression, and factor analysis. Notwithstanding, since May of 1973, users in the central office and in many schools have enjoyed on-line access to any variable in the bank. The improvement represented by the above is substantial: (1) an in-district system (versus one in which the Project had always been relegated to squeeze-it-in, odd hours status) assures high priority consideration, and (2) multi-terminal access means greatly enhanced speed, visibility, and excitement for the Project at large.

Objective III -- Training System Users

This objective predominated for the third and final year of the Project under ESEA Title III. As intimated earlier, the training effort was going on during the second and even the first year of SIS (see, for example, pp. 27-28 in the 1971 CGA). Furthermore, the interpretive memorandums--an important component of the in-service program--had been prepared, circulated, and discussed among the targeted administrators since early in the second year.

Nonetheless, the training objective moved to center stage only during the past year. August of 1972 was the first time that the principals were brought out of their daily problems and put through several days of intense exposure to SIS materials. Parenthetically, what the Project did at that time was adopted by the District's top administration as the major in-service session for school principals.

Documentation of the program, including a 41-page evaluation report, is given in Appendix B. Highlights of the report are summarized below. There were eight subgoals of the overall training program: (1) To provide principals an opportunity to review and apply 1971-72 SIS data to specific task situations. (2) To assist principals in acquiring a functional knowledge of SIS. (3) To assist principals in the use of SIS data for decision making relating to goal setting and problem identification. (4) To assist principals in the utilization of SIS data in program evaluation. (5) To assist principals in the interpretation and use of the Student, Teacher, and Parent Surveys. (6) To assist principals in communicating information to staff, students, and the public. (7) To provide knowledge about the nature and qualities of decisions and information. (8) To show the relation between SIS reports and accountability.

Three instruments were used to collect evaluation information: Participant ratings (post only) of the program's value, a content

test (pre and post), and a test simulation (pre and post). In addition, district evaluators rapped participants informally on a periodic basis, and a suggestion box was provided.

While the aforesaid report offers considerable detail about the results, only major conclusions will be excerpted here.

> In general, the training program may be labelled a highly successful in-service effort. Eighteen of the twenty-five evaluation objectives were achieved. These included at least one objective under each of the eight subgoals. The in-service proved most successful in achieving objectives related to goal setting, problem identification, and program evaluation. The areas seeming most in need of follow-up are the application of SIS data, functional knowledge of the system, and communication techniques.
>
> None of the fifteen program components were rated so low as to dictate its being eliminated from future replications. Each component was rated at or above the midpoint of the scale by at least one of the two groups.

The second major in-service effort for the Project occurred in early November, less than three months after the first effort. (Parenthetically, this second training program was not originally scheduled in project objectives but grew out of demand apparently generated from the training for principals.) The target population this time included virtually all central office administrators and supervisors. This program was about half as long as the one for principals, so goals were a bit less ambitious: To ascertain specific needs for post-program training for the population, and to assess the extent to which these same people accept and understand the School Information System.

The assessment was based on instruments essentially the same as those used with the program for the principals. Since a copy of the entire evaluation is given in Appendix C, only a summary is provided here. The two-day workshop for the central office appeared to have about the same measure of success enjoyed by the program for field administrators.

In particular,

--Cognitive instruments administered before and after the workshop indicate knowledge gains among nearly all participants. An attitude scale used at the end of the program showed highly favorable feelings in workshop-related areas.

--Smallest gains in measured knowledge occurred in the area of goal setting and problem identification. Possibly because of increased item difficulty, post-test percentages of correct response declined on several items in this area.

--No single area emerges from the evaluation results as most important for future in-service training. Despite the decline in the goal setting area, these post-test percentages compared favorably with those for program evaluation, survey use, and functional knowledge of SIS. The approach of the workshop in dealing briefly with several major areas apparently served to supply some general deficiencies in the knowledge necessary to use SIS effectively.

--Attitudes toward topics related to workshop content and goals appear rather uniformly positive. Items in three categories, SIS, Using Evaluation Data, and the Workshop produced consistent mean scores. Participants generally agreed with favorable statements and disagreed with unfavorable statements.

Almost at the same time as the workshop for central office personnel, one of the assistant superintendents--as part of another study--surveyed a handful of principals as to (1) their current or planned use of SIS, (2) the monetary value of SIS data to them, (3) their interest in accessing SIS reports via computer terminal, and (4) teachers who have expressed interest in having a terminal at their school. All respondents checked "yes" to #1 and fluctuated between "don't know" and $750 on #2, while a majority reacted positively to #3. Only on the fourth question did the principals get split evenly between affirmative and negative responses.

In the same vein as the fall workshop, three other "rump" sessions were generated out of rather spontaneous felt needs. One was held for selected staff in the Division of Personnel, and another worked with directors in the Department of Human Resources. Both of the foregoing, incidentally, were quite small and emphasized specific applications of SIS reports. They were not evaluated by the Project.

The third, put on in late March, was intended for instructional supervisors. The project evaluator would like to take just a few words to compliment the project manager on the reception given his presentation. All nineteen participants reported they were "motivated" by the session, and all but one checked "good" (versus "fair" or "poor") as their overall assessment. A copy of materials used as well as the appraisal instrument is given in Appendix D.

The final focus of evaluation for the third year's major

objective (again, training SIS users to understand and use SIS products) was a late April survey of all the principals. This survey of the principals was deemed of major importance in terms of its focus and its timing. The focus, of course, was the target group acknowledged as paramount. The timing was equally significant since it came after all essential efforts had been carried out. All other assessments preceded sizeable segments of the Project under Title III.

First, a few words about survey response. After two follow-up contacts, 96 of the 98 principals (two covering two schools apiece) completed and turned in the survey. Another indicator of the target group's responsiveness was the 60 percent who went well beyond a perfunctory circling of listed items and volunteered no less than a full sentence of commentary. In fact, only 13 of the 96 respondents did not take the time to write something.

The basic format for reporting the results will be item by item. A copy of the cover letter and instrument sent out is given in Appendix E. The structured or closed-end responses are enumerated initially with the unstructured written results stated subsequently.

Item 1 queried understanding of SIS reports. Of the four choices provided, 22 reported "very well", 74 marked "rather well", and therefore none fell into the lower two categories. Regarding volunteered comments, most centered on the training they had received. Three noted that the workshop had been helpful, four wrote that the five half-day sessions had been too long, four expressed interest in more instruction, and a couple complained about the difficulty of quickly finding pages of immediate concern.

Item 2 inquired about the general frequency of report usage. Fifty, a slight majority, replied "monthly", while 13 and 12 reported "weekly" and "annually" respectively. Only 3 purported to use SIS documents "daily." Another 20 commented to the effect that they tended to use the reports as needed or at varying times.

Results for item 3, regarding the extent and kind of use made of the reports (at large, are shown in Table I below).

TABLE I: Answers To #3; "How much do you refer to the report?"

Areas Of Use	Not At All	A Little	Some-what	A Lot	Aver-age*
a) To answer staff questions	2	27	54	13	2.8
b) To answer parent questions	5	39	41	11	2.6
c) For discussion in staff mtgs.	1	19	45	31	3.1
d) For disc. in community mtgs.	0	30	42	24	2.9
e) To assess needs or develop goals for your school	1	11	36	48	3.4
f) To evaluate aspects of your school	1	6	44	45	3.4

*Calculated with a 1-4 point scale with high score meaning high usage

The reader can see readily that overall usage in terms of the above areas was reasonably high in all cases. For example, the least reported function, "to answer parent questions", had an average response of 2.6 or slightly above the midpoint between "a little" and "somewhat." The highest areas of use, as shown in the table, were "e" and "f." It should be noted further that needs assessment, goal development, and program evaluation--represented by "e" and "f"--have been areas of highest priority for SIS since its inception. Rather few longhand reactions were elicited by #3. Four principals said they referred to SIS reports for various kinds of planning; e.g., "give direction for the coming year." Two cited the reports as a tool for decision-making, while sundry others mentioned answering questions of individuals, analyzing grade level performance, and "comparative purposes."

Item 4 asked respondents to indicate their interest in the various reports. Results are given in Table II.

TABLE II: Answers To #4: "Rank each SIS Report in terms of interest for you."

	None	Low	Medium	High	Average*
a) Exceptional Characteristics	1	12	35	45	3.3
b) Variable Printout	4	10	49	31	3.2
c) Factor Stanine	3	10	44	37	3.2
d) Variable Stanine	4	13	47	29	3.1
e) Student Survey	2	6	30	57	3.5
f) Teacher Survey	0	3	26	65	3.7
g) Parent Survey	0	2	31	63	3.6
h) Goal Survey	0	6	38	51	3.5
i) Trend Report	0	12	36	44	3.3
j) Achievement Forecast	4	7	32	48	3.4

*Based on a 1-4 point scale with 4 meaning "high"

In general, one can note the substantial interest of the principals at large in all the reports. Considering the centers of gravity or average figures, no report fell below "medium." And the four surveys, led by the Teacher Survey, rated above any of the other six reports.

In an attempt to tease more meaning from the data, they were tabulated by elementary versus secondary groups on item 3 as well as item 4. Only one sizeable difference in response was found. On the Achievement Forecast (j under #4), the average secondary response was only 3.0 while that for elementary was 3.5. This unique discrepancy could have been explained by the fact that this report was yet to be prepared on secondary schools while all elementaries had received their first Achievement Forecast just a couple of months earlier.

The fifth item on the final survey of the principals asked, "What would you like SIS to emphasize next year?" As intended, several gave more than one answer to #5. Better than one third (i.e., 33) circled "more help with data usage", 20 specified "shorter or fewer reports", while 19 indicated "more training for users."

Beyond circling the stated choices, more than a score wrote out individual responses which have been grouped below into two categories--the "positive", meaning more of something is wanted; and the "negative", where some improvement is requested. Four principals declared their interest in getting more comparative information at the sub-district level, especially on sets of schools like their own. Four also wanted more trend data, particularly that showing student growth. Two called for more testing, with one of them adding "in all grades." Another two reiterated the now long-term plea for pupil/level data.

The most frequently requested improvement was to cut the size of the reports, with three referring apparently to the number of pages (e.g., "a mass to digest") and two others focusing on the physical dimensions of the 14 by 11 inch printouts. Four principals criticized the timing of the reports (e.g., "like yesterday's newspaper") with a couple of these dubbing August as a better time to make them available. Three commented on the rather confusing way in which they have to switch measurement concepts when going from one report to another. Another improvement requested by a threesome was greater accuracy or validity of the data; in the words of one, "It's okay, as gossip or propaganda."

Number 6, the final item on the survey, was the most open one: "...express in your own words what you think of SIS." The most sweepingly negative reaction to the Project, articulated by three principals, was that it seemed nonessential. Two of them wrote that it has been much like what is already available. As one put it, "it tells me little I cannot guess about." A second declared flatly that it "should not be funded with local monies." The third general critic offered a full-blown diatribe on how the guts of what schools should be about cannot be computer programmed. A fourth respondent, while conceding some value to SIS, went on to put it definitely below his priority for "more help in the classroom."

Four principals attacked project ramifications which were really outside SIS control--namely, the uses to which project reports have been and have not been directed. Regarding the former, one wrote that "SIS stuff is used mainly to show parents why we fail in so many respects, to make excuses, to indicate that 'here are the reasons we can do only so much.'" On the "have not" side, a couple

opined that project documents have had very limited influence on "policy decisions" or on the "instructional program." The third sadly concluded that "even if we get meaningful information and set goals, the lack of money usually precludes doing anything about it."

Positive or complimentary statements about the School Information System were also rather general. The following quotations were selected from the returns of 11 rather like-minded principals: "Great improvement over last year"; the reports "grow on me as I use them"; we're "just beginning to realize the full potential"; keep it, "even if Board funds are necessary"; I was "a skeptic at first, but now completely sold"; it's our "best indicator of present status and problems"; "we must have this type of information if we are to be given more control over goals and programs." Finally, one high school principal's reaction seemed more pragmatic and provocative than positive or negative: "When data supports my position and direction, beautiful; when it does not..."

The foregoing elaboration of results from the recent principals' survey can be summarized briefly. A large majority of the District principals indicated appreciable understanding as well as definite and diverse usage of SIS reports. The candor as well as the amount of volunteered responses served as undeniable evidence that the survey had been well received.

The report on the final evaluation of the Project would not have been complete without presenting at least a few conclusions and recommendations. Most generally, results of the survey show the Project to be essentially on target, since its basic objective of reaching the principals with the Information System has been achieved. Nonetheless, there is a fundamental message still to be communicated to a number of the principals: That a computer-centered operation like SIS is not and may never be a panacea for decision-makers. Some comments intimated that SIS might automate principals as well as data reports. To this writer's knowledge, no one on the project staff has ever seriously conceived of SIS as more than a tool or aide for management. In fact, the emphatically individual and judgmental role of principals may well be <u>enhanced</u> by a computerized data bank, since it should give them more time for pursuing <u>other</u> bases for their decisions.

Suffice for generalizations. More specific conclusions follow.

(1) <u>Training</u> for users has been reasonable successful but doubtless can be reinforced. According to the survey, the most needed focus would be data utilization, although some further work is also indicated for comprehension of key measurement concepts.

(2) Simplification of reports should be reasserted. This process would include (a) the possibility of cutting down on the number and/or length of reports and (b) the certainty of developing more handy references or indexes. In regard to (a), one often discussed prospect has been the condensation if not elimination of the Variable Stanine. As far as references go, there is already a one-page list of practically all SIS data by category, and a table of contents is currently being put at the front of all school reports housed in the centralized Information Center.

(3) Surveys must continue to be improved. In light of their most prominent place in the stable of reports, the surveys merit periodic efforts to upgrade their validity--to the point that no principal will dismiss them merely as "okay for gossip and propaganda."

(4) Subdistrict aggregations should be considered again for possible inclusion. At least several principals would find this worthwhile in addition to national and district-wide comparisons already available.

(5) Timeliness of the various reports hopefully can become a system highlight in the future. Getting data disseminated before they are a year old seems both reasonable and feasible. At the very least, printouts of selected data can be prepared much faster than is currently done.

Finally, at least one other category of people have been served by the Project--those not formally identified above but nonetheless interested in SIS products. For the most part, this "other" category referred to non-district people. The project staff has maintained a file of who these people were, what they wanted, and why.

The "who" ranged from personnel in the area's Community Chest, Model Cities, and Cincinnati's Department of Urban Planning to local university faculty and graduate students, from researchers for nearby businesses to administrators for the archdiocesan schools, from community school associations and board of education members to district teachers. At one point, a call was received from a supervisor of job training for the Ohio State Department of Education, illustrating that interest sometimes went beyond the immediate metropolitan area.

"What" was wanted and "why" naturally varied too. For example: The state department employee sought enrollment and dropout data on a number of secondary schools in order to answer an inquiry from the United States Office of Education. One parochial school administrator wanted to see our survey formats with the thought of developing similar instruments for his own client populations. The municipal government planners were after socioeconomic documentation to support an application for a new community service facility, and several community groups wanted local school achievement information on which to base impending meetings. The Legal Aid Society was trying to determine how many students were taking advantage of free or subsidized lunches, so that participation could be encouraged if the need was there. Then the many professors and students had eyes for sundry reports depending on their current academic or research assignments.

Results Outside Expectations

Exceeding the expectation of SIS staffers were the surprising ease of converting survey reports from the IBM to the HP computer system, the strong and sustained interest in survey results, the consistently favorable reaction by visitors from the outside, and the aforementioned success of the several training programs.

Disappointing our expectation, on the other hand, were the small amount of research based on SIS data, the difficulty of procuring new and more telling variables, the value of Committee A (see the 1971 CGA), the unrequited struggle to convert U. S. Census Tracts to school attendance areas (although the possibility is not dead), the lack of success in encompassing cost data (largely due to the District's traditional mode of recording budgets and expenditures), and the limitation on the automation effort. To elaborate a bit on the last disappointment, a major portion of in-district

data is not on machine cards but must be copied manually from various reports; this is also true of voting data collected from the Board of Elections.

Impact Of The ESEA Title III Project

It is a genuine pleasure to report that the School Information System was picked up by local funds when the Title III grant expired April 30, 1973. Moreover, the extent of on-going local support has been most gratifying. The current projection is very close to $60,000 annually. While the Project's third-year under federal funds was about $79,000; almost all of the difference is attributable to the loss of one programmer. In light of the fact that practically all of the software had been developed already, this cut must be viewed as reasonable and modest.

The continuity of support level is underlined by no real change in the Project's original objectives and activities. Probably the most noticeable modification has been in the Project's location. In the context of a widely reorganized Central Office, it now operates under the Administrative Branch of the Department of Research and Development. So it remains in the same department as before but under a different branch.

II. E. Dissemination

As has been made abundantly clear in the two Continuation Grant Applications, the ten or more formal data reports have constituted the backbone of project dissemination. To repeat, these computer printouts--along with explanatory memorandums on each--have reached all 100 of the District's regular elementary and secondary schools.

Continuing as supplementation to the above have been (1) writings from or about the Project and (2) oral presentations and discussions based partly and sometimes wholly on SIS materials. The writings usually have been brief, ad hoc items appearing in SIS Quiks, the project newsletter, or in R & D Briefings and Information Highlights, newsletters for the Division of Program Research and Design. The oral activity has revolved around staff and community meetings at individual schools (e.g., see p. 34 in the second CGA).

A recent addition to the vehicles for project dissemination has been the "School Reports." A sample of these is given in Appendix F. While not explicitly identified with SIS, their contents were taken therefrom. The School Reports were prepared in January and February, the used in March and April in conjuntion with the District's campaign to pass a school tax levy.

The cost of dissemination activities has always been difficult to determine because of the inherent place they have in the Project. By including duplicating costs, clerical services, as well as professional staff time, the project manager estimated an expenditure of $25,000 for 1972-73. So the three-year total was put in the neighborhood of $75,000.

II. F. Recommendations

The following recommendations are being presented under general categorial headings to which they most directly relate:

A. Personnel

To effectively operationalize the system presented in this report at the very minimum five full-time people should be employed. Job titles and brief descriptions of each are:

Manager of the System
Management training and experience are of necessity
System's background
Research and evaluation skills
Reporting skills
Speak well and communicate effectively

Two (2) Programmer Analysts
Experience in the field of data processing as programmer and analyst
Formal training in system's design and mathematics
Knowledge of statistical principles
Communicate effectively and cooperativeness

Statistical Clerk
High threshold for detail work
Favorable attitude
Experience and proficiency in using a calculator
Ability in dealing with numbers

Senior Stenographer
Must possess high quality secretarial skills

B. Data Collection

At the outset of developing such a system careful attention should be given to what data will be collected, who will collect the data, how it is to be collected, when it is available, and how is the data available; i.e., hard copy, on punch cards, disk, tape, etc.

If no specific department or division has this responsibility, then such a department or group of people should be identified to carry out the above details.

C. Training and Use

Much time should be spent in developing materials on how the system is to be used. Examples and "real life" situations should be used to show how to make use of the system.

At least a two week period of time should be set aside for training users and potential users of the system. Then, continued follow-up and ad hoc training should take place throughout the course of one year for new users of the system. Additional training should take place for any modifications in the system that may occur. Materials should be prepared in advance that can be used for individual or self instruction or updating.

D. Data Processing

Hardware: Some generalizable system specifications that should be as closely met as possible include: 64K storage capacity, two disk drives, two tapes, plus peripheral gear; i.e., key-punch machines, scanning machines, card sorters, etc.

Software: Much of the software (programs) produced by SIS is transferable and adaptable--assuming some compatibility in hardware. SIS programs can be used on IBM and Hewlett-Packard machinery.

It would be to the system's advantage to plan work tasks at least six weeks in advance in order to give programmer/analysts sufficient time to write, test, and "de-bug" programs. In this way this should ensure the production of reports when promised.

E. The Larger Operating System

It should be clearly identified where in the larger organization or operating system the management and evaluation system will fit. Organizationally speaking, it should be determined who will the manager have to report to, what freedom will the management and evaluation system have in producing reports, how much ($) support can they expect presently and over the next

five years. It should also be determined beforehand the attitudes of existing staff toward your incoming system. Are they receptive? Do they want to use it? Does it seem to make sense?

F. The Decision Maker and Categories of Decisions to be Made

What seemed to be the simplest tasks to be performed--trying to determine who the decision makers were and what decisions they make--turned out to be the most difficult. Reasons for this included the fact that decision makers do not always know what decisions they do or can make, and what data they want. Further, for a project staff it is a most difficult task to try and determine who has "sign-off" authority. With this as background, it is strongly felt that if there is one particular thing that can lead to a lot of wasted effort it is not knowing who you should be providing information to in order to assist in the decision-making process. Therefore, it is recommended that this assignment be given high priority in trying to establish a School Management and Evaluation System. It is felt that if the task is carried out adequately, much will have already been done to begin operationalizing an effective School Information System.

G. System Design

Critical attention should be given to how the data base will be established. To answer this question, the following concerns must first be addressed:

1. What kind of reports will be produced?
2. At what time?
3. How soon do people need the data/information?
4. What kind of decisions will be made?

It is felt that depending on how these questions are answered only then will the necessary direction be given regarding the need for an "on-line" system, whether reports can be produced in batch mode, or whether or not you need a combination of the two.

Committee

Before establishing committees to work with on projects, make positively sure the Project needs this type of structure and be willing to put in much time and effort to work with a committee. Remember, people working on the Project are more involved than committee members.

Hence, much time in committee work is spent on constantly bringing committee people up-to-date. Therefore, as far as Project personnel is concerned, they are going over matters they already addressed, in some cases, one month previous.

On the positive side of the ledger, depending upon who committee members represent and their position(s) in the existing organization, a committee could be an invaluable mechanism in assisting a Project to continue under local Education Agency dollars.

II. G. Abstract For Eric

School Information System: 1973 Report
Cincinnati Public Schools

Picked up by ESEA Title III in 1970, the School Information System (SIS) was designed essentially to furnish school administrators with data and information on which to make better decisions. The basic means were to (1) build and improve a data bank, (2) prepare and disseminate computerized reports (to the decision-makers--especially school principals), and (3) train them to understand and ultimately to use the reports in their management of schools.

Results generally exceeded expectations. As illustration, by the end of the third year, all of the 96 principals (of the 98 total) responding to a survey reported they understood SIS reports "rather well" or "very well", while a consistent majority said they used the reports at least monthly for a half-dozen different functions.

In addition, the reports turned out to have considerable appeal to community and parent groups plus central office personnel--as well as for the principals and assistant principals. Perhaps most indicative, a major part of project costs were picked up by local funds after the Title III grant expired April 30, 1973.

APPENDIX A

School Information System Reports

ESEA TITLE III

CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM

DIVISION OF PROGRAM RESEARCH & DESIGN

EXCEPTIONAL CHARACTERISTICS OF YOUR SCHOOL
1971-72 SCHOOL YEAR

POSITIVE CHARACTERISTICS (BASED ON SCHOOL ACHIEVEMENT)	NEGATIVE CHARACTERISTICS (BASED ON SCHOOL ACHIEVEMENT)	CAN NOT DETERMINE IF POSITIVE OR NEGATIVE CHARACTERISTICS (BASED ON SCHOOL ACHIEVEMENT)
LOW AVERAGE DAILY ABSENCE - GRADE K	HIGH % TRANSFERS-IN - GRADE K	LOW AVERAGE DAILY MEMBERSHIP - TOTAL
HIGH AVERAGE DAILY ATTENDANCE - GRADE K	HIGH % TRANSFERS-OUT - GRADE K	LOW GROSS MEMBERSHIP - TOTAL
LOW AVERAGE DAILY ABSENCE - GRADE 5	HIGH % LEAVING SCHOOL - GRADE K	LOW AVERAGE DAILY MEMBERSHIP - GRADE 1
HIGH AVERAGE DAILY ATTENDANCE - GRADE 5	HIGH % LEAVING SCHOOL - GRADE 1	LOW GROSS MEMBERSHIP - GRADE 1
LOW % NEW ENROLLMENTS - TOTAL	HIGH % TRANSFERS-OUT - GRADE 2	LOW AVERAGE DAILY MEMBERSHIP - GRADE 2
LOW % EXTERNAL TRANSFERS - TOTAL	LOW % BOYS PROMOTED - GRADE 2	LOW GROSS MEMBERSHIP - GRADE 2
LOW % LEAVING SCHOOL - TOTAL	LOW % TOTAL PROMOTED - GRADE 3	LOW GROSS MEMBERSHIP - GRADE 3
LOW % EXTERNAL TRANSFERS - GRADE K	LOW % BOYS PROMOTED - GRADE 3	LOW AVERAGE DAILY MEMBERSHIP - GRADE 4
LOW % NEW ENROLLMENTS - GRADE 1	LOW GR. 3 READING(75%)	LOW GROSS MEMBERSHIP - GRADE 4
LOW % EXTERNAL TRANSFERS - GRADE 1	LOW GR. 3 READING(90%)	LOW AVERAGE DAILY MEMBERSHIP - GRADE 5
LOW % NEW ENROLLMENTS - GRADE 2	LOW GR. 3 WORD KNOWLEDGE(75%)	LOW GROSS MEMBERSHIP - GRADE 5
LOW % LEAVING SCHOOL - GRADE 2	LOW GR. 3 WORD ANALYSIS(75%)	LOW AVERAGE DAILY MEMBERSHIP - GRADE 6
LOW % NEW ENROLLMENTS - GRADE 3	LOW GR. 3 WORD ANALYSIS(90%)	LOW GROSS MEMBERSHIP - GRADE 6
LOW % LEAVING SCHOOL - GRADE 3	LOW GR. 3 SPELLING(75%)	HIGH % BLACK MEMBERSHIP
LOW % LEAVING SCHOOL - GRADE 4	LOW GR. 3 SPELLING(90%)	LOW GR. 3 READING VARIABILITY
LOW % EXTERNAL TRANSFERS - GRADE 5	LOW GR. 3 ARITH. COMPUTATION(10%)	LOW GR. 3 WORD KNOWLEDGE VARIABILITY
LOW % LEAVING SCHOOL - GRADE 5	LOW GR. 3 ARITH. COMPUTATION(75%)	LOW GR. 3 WORD ANALYSIS VARIABILITY
LOW % LEAVING SCHOOL - GRADE 6	LOW GR. 3 ARITH. COMPUTATION(90%)	LOW GR. 3 SPELLING VARIABILITY
HIGH % GIRLS PROMOTED - TOTAL	LOW GR. 3 ARITH. CONCEPTS(25%)	LOW GR. 3 ARITH. COMPUTATION VARIABILITY
HIGH % TOTAL PROMOTED - GRADE K	LOW GR. 3 ARITH. CONCEPTS(75%)	LOW GR. 3 ARITH. PROB. SOLV. VARIABILITY
HIGH % BOYS PROMOTED - GRADE K	LOW GR. 3 ARITH. CONCEPTS(90%)	LOW GR. 6 READING VARIABILITY
HIGH % GIRLS PROMOTED - GRADE K	LOW GR. 3 ARITH. PROB. SOLV.(90%)	LOW GR. 6 WORD KNOWLEDGE VARIABILITY
HIGH % GIRLS PROMOTED - GRADE 1	LOW GR. 6 READING(90%)	LOW GR. 6 LANGUAGE VARIABILITY
HIGH % GIRLS PROMOTED - GRADE 2	LOW GR. 6 WORD KNOWLEDGE(90%)	LOW GR. 6 ARITH. COMPUTATION VARIABILITY
HIGH % GIRLS PROMOTED - GRADE 3	LOW GR. 6 LANGUAGE(90%)	LOW GR. 6 ARITH. CONCEPTS VARIABILITY
HIGH % TOTAL PROMOTED - GRADE 4	LOW GR. 6 ARITH. CONCEPTS(90%)	LOW GR. 6 ARITH. PROB. SOLV. VARIABILITY
HIGH % BOYS PROMOTED - GRADE 4	LOW GR. 6 ARITH. PROB. SOLV.(90%)	LOW GR. 3 IQ VARIABILITY
HIGH % GIRLS PROMOTED - GRADE 4	LOW GR. 3 IQ (10%)	LOW GR. 6 IQ VARIABILITY
HIGH % TOTAL PROMOTED - GRADE 5	LOW GR. 3 IQ (75%)	LOW % ON STAFF
HIGH % BOYS PROMOTED - GRADE 5	LOW GR. 3 IQ (90%)	LOW PUPIL/TEACHER RATIO - GRADE 1
HIGH % GIRLS PROMOTED - GRADE 5	LOW GR. 6 IQ (90%)	LOW PUPIL/TEACHER RATIO - GRADE 2
HIGH % TOTAL PROMOTED - GRADE 6	LOW PARTICIPATION DASH-BOYS I	LOW PUPIL/TEACHER RATIO - GRADE 6
HIGH % BOYS PROMOTED - GRADE 6	LOW PARTICIPATION THROW-BOYS I	HIGH AVERAGE DAILY ABSENCE - SPECIAL
HIGH % GIRLS PROMOTED - GRADE 6	LOW PARTICIPATION POLE CLIMB-BOYS I	LOW % NEW ENROLLMENTS - SPECIAL
LOW 50 YD. DASH SCORE-BOYS II	LOW PARTICIPATION BROAD JUMP-BOYS I	HIGH % TRANSFERS-OUT - SPECIAL
HIGH STUNTS/GAME SKILLS SCORE-BOYS II	LOW PARTICIPATION STUNTS-BOYS I	LOW % EXTERNAL TRANSFERS - SPECIAL
HIGH BALL THROW SCORE-BOYS III	LOW PARTICIPATION DASH-GIRLS I	LOW % LEAVING SCHOOL - SPECIAL
HIGH BALL THROW SCORE-GIRLS III	LOW BROAD JUMP SCORE-GIRLS I	HIGH % TOTAL PROMOTED - SPECIAL
HIGH STUNTS/GAME SKILLS SCORE-GIRLS III	LOW PARTICIPATION STUNTS-GIRLS I	HIGH % BOYS PROMOTED - SPECIAL
HIGH STUNTS/GAME SKILLS SCORE-BOYS IV	LOW PARTICIPATION DASH-BOYS II	HIGH % GIRLS PROMOTED - SPECIAL
HIGH BALL THROW SCORE-BOYS V	LOW PARTICIPATION THROW-BOYS II	
HIGH STUNTS/GAME SKILLS SCORE-BOYS V	LOW PARTICIPATION POLE CLIMB-BOYS II	
HIGH STUNTS/GAME SKILLS SCORE-GIRLS V	HIGH POLE CLIMB SCORE-BOYS II	
HIGH OVERALL PARTICIPATION-BOYS	LOW PARTICIPATION BROAD JUMP-BOYS II	
HIGH SCHOOL ATMOSPHERE FACTOR	LOW BROAD JUMP SCORE-BOYS II	

ESEA TITLE III

CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM

DIVISION OF PROGRAM RESEARCH & DESIGN

SCHOOL VARIABLE PRINTOUT

1971-72 SCHOOL YEAR

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL ELEM. SCHOOL UNITS	CRITICAL AREA
	1. PUPILS				
	ABSENCE AND ATTENDANCE				
	TOTAL SCHOOL				
25.00	AVERAGE DAILY ABSENCE	(-)	6.94%	8.55%	5.98% TO 11.12%
336.00	AVERAGE DAILY ATTENDANCE	(+)	93.33%	91.52%	88.84% TO 94.20%
	GRADE K				
3.00	* AVERAGE DAILY ABSENCE	(-)	6.98%	13.10%	8.72% TO 17.44%
46.00	* AVERAGE DAILY ATTENDANCE	(+)	93.02%	86.90%	82.51% TO 91.29%
	GRADE 1				
4.00	AVERAGE DAILY ABSENCE	(-)	8.33%	8.83%	6.22% TO 11.44%
44.00	AVERAGE DAILY ATTENDANCE	(+)	91.67%	91.17%	88.53% TO 93.81%
	GRADE 2				
3.00	AVERAGE DAILY ABSENCE	(-)	6.38%	7.47%	5.04% TO 9.90%
44.00	AVERAGE DAILY ATTENDANCE	(+)	93.62%	92.52%	90.06% TO 94.98%
	GRADE 3				
4.00	AVERAGE DAILY ABSENCE	(-)	7.41%	7.22%	4.46% TO 9.98%
50.00	AVERAGE DAILY ATTENDANCE	(+)	92.59%	92.78%	89.99% TO 95.57%
	GRADE 4				
3.00	AVERAGE DAILY ABSENCE	(-)	6.00%	7.63%	4.81% TO 10.45%
47.00	AVERAGE DAILY ATTENDANCE	(+)	94.00%	92.37%	89.53% TO 95.21%
	GRADE 5				
2.00	* AVERAGE DAILY ABSENCE	(-)	3.77%	7.52%	4.16% TO 10.88%
51.00	* AVERAGE DAILY ATTENDANCE	(+)	96.23%	92.48%	89.10% TO 95.84%
	GRADE 6				
3.00	AVERAGE DAILY ABSENCE	(-)	6.25%	7.75%	4.47% TO 11.03%
45.00	AVERAGE DAILY ATTENDANCE	(+)	93.75%	92.25%	88.96% TO 95.54%
	ABSENCE BY SEX				
12.00	BOYS	(-)	7.02%	8.49%	5.81% TO 11.17%
13.00	GIRLS	(-)	6.88%	8.03%	6.08% TO 11.18%

* S IS ERGI NAL ABLI

ESEA TITLE III
CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

FACTOR STANINE PROFILE
1971-72 SCHOOL YEAR

		DIRECTION OF FACTOR	STANINE 1 2 3 4 5 6 7 8 9	PERCENTILE	STANINE
	INPUT FACTORS				
1	SOCIO-ECONOMIC STATUS	(+)		26	3.72
2	INTER-CITY MOBILITY	(-)		3	1.24
3	INTRA-CITY MOBILITY	(-)		70	6.04
4	COMMUNITY INVOLVEMENT & SUPPORT	(+)		55	5.26
5	SCHOOL POPULATION	( )		6	1.88
6	PARENT ATTITUDE	(+)		17	3.10
7	STAFF ATTITUDE	(+)		63	5.66
8	STAFF CHARACTERISTICS	(+)		16	3.02
9	STAFF STABILITY	(+)		10	2.66
10	STAFF TRAINING	(+)		20	3.32
	OUTPUT FACTORS				
11	ACHIEVEMENT - GR. 3	(+)		25	3.65
12	VERBAL ACH. VARIABILITY - GR. 3	( )		1	0.34
13	ARITH. ACH. VARIABILITY - GR. 3	( )		9	2.32
14	ACHIEVEMENT - GR. 6	(+)		47	4.84
15	VERBAL ACH. VARIABILITY - GR. 6	( )		10	2.44
16	ARITH. ACH. VARIABILITY - GR. 6	( )		4	1.50
17	STUDENT ACADEMIC CONFIDENCE	(+)		43	4.64
18	STUDENT SCHOOL ATTITUDE	(+)		60	5.50
19	STUDENT SELF ATTITUDE	(+)		41	4.54
20	STUDENT INCENTIVE FOR LEARNING	(+)		29	3.90

ESEA TITLE III
CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

VARIABLE STANINE PROFILE
1971-72 SCHOOL YEAR

VARIABLE	DIRECTION OF VARIABLE	STANINE 1 2 3 4 5 6 7 8 9	PERCENTILE	STANINE
I. PUPILS				
ABSENCE AND ATTENDANCE				
TOTAL SCHOOL				
AVERAGE DAILY ABSENCE	(-)		34	4.18
AVERAGE DAILY ATTENDANCE	(+)		68	5.94
GRADE K				
AVERAGE DAILY ABSENCE	(-)		3	1.24
AVERAGE DAILY ATTENDANCE	(+)		97	8.76
GRADE 1				
AVERAGE DAILY ABSENCE	(-)		46	4.80
AVERAGE DAILY ATTENDANCE	(+)		54	5.20
GRADE 2				
AVERAGE DAILY ABSENCE	(-)		37	4.34
AVERAGE DAILY ATTENDANCE	(+)		63	5.66
GRADE 3				
AVERAGE DAILY ABSENCE	(-)		60	5.50
AVERAGE DAILY ATTENDANCE	(+)		40	4.50
GRADE 4				
AVERAGE DAILY ABSENCE	(-)		32	4.06
AVERAGE DAILY ATTENDANCE	(+)		68	5.94
GRADE 5				
AVERAGE DAILY ABSENCE	(-)		7	2.04
AVERAGE DAILY ATTENDANCE	(+)		93	7.96
GRADE 6				
AVERAGE DAILY ABSENCE	(-)		41	4.54
AVERAGE DAILY ATTENDANCE	(+)		59	5.46
ABSENCE BY SEX				
BOYS	(-)		37	4.34
GIRLS	(-)		30	3.96

CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

STUDENT SURVEY

MAY - 1972

		ELEMENTARY SCHOOL UNIT			ALL ELEMENTARY SCHOOL UNITS		
		% AGREE	% DISAGREE	% UNDECIDED	% AGREE	% DISAGREE	% UNDECIDED
		N = 119			N = 5,148		
FACTOR I	ACADEMIC CONFIDENCE						
ITEM #	ITEMS COMPRISING ABOVE FACTOR						
2.	I NEED MORE HELP IN SOME OF MY STUDIES.	75	11	12	73	15	10 $
7.	I GET ALONG BETTER OUTSIDE OF SCHOOL THAN IN SCHOOL.	45	26	27	46	30	23
9.	I AM SATISFIED WITH THE GRADES ON MY REPORT CARD.	52	36	10	48	39	12
22.	MY PARENTS THINK I SHOULD DO BETTER IN MY SCHOOLWORK.	65	20	14	71	17	11
30.	MY TEACHERS THINK I SHOULD DO BETTER IN MY SCHOOLWORK.	49	15	34	62	13	23
FACTOR II	ATTITUDE TOWARD SCHOOL						
ITEM #	ITEMS COMPRISING ABOVE FACTOR						
1.	I LIKE SCHOOL.	57	10	31	62	14	23
4.	I LIKE MY SCHOOL.	41	26	31	55	24	20
8.	I WOULD LIKE TO SPEND MORE TIME AT SCHOOL.	15	66	17	21	62	16
12.	I LOOK FORWARD TO COMING TO SCHOOL.	52	24	23	52	27	19
20.	SCHOOLWORK IS INTERESTING TO ME.	42	21	36	52	19	27
25.	I LIKE READING.	67	16	15	65	21	13
27.	I LIKE MY TEACHERS.	52	12	34	66	11	21
29.	I WOULD COME TO SCHOOL EVEN IF I DID NOT HAVE TO.	42	35	21	44	38	17
FACTOR III	SELF ATTITUDE						
ITEM #	ITEMS COMPRISING ABOVE FACTOR						
5.	I FEEL THAT PEOPLE GENERALLY LIKE ME.	76	6	16	63	13	22
10.	TEACHERS CARE ABOUT ME.	38	14	47	51	16	31
17.	I LIKE TO WORK ON MY OWN.	68	10	21	73	12	13
21.	MY TEACHERS THINK I AM DOING WELL IN MY SCHOOLWORK.	48	14	36	43	19	36
23.	IT IS HARD FOR ME TO MAKE FRIENDS.	1	80	7	17	71	11
24.	I AM AN UNLUCKY PERSON.	15	66	17	23	58	17
26.	SCHOOLWORK IS TOO HARD FOR ME.	1	85	12	7	76	15
28.	I AM A HAPPY PERSON.	82	7	10	73	12	14
FACTOR IV	INCENTIVE FOR LEARNING						
ITEM #	ITEMS COMPRISING ABOVE FACTOR						
6.	I ENJOY OUT-OF-CLASS SCHOOL ACTIVITIES.	94	3	2	88	5	5
13.	I TALK ABOUT SCHOOL AT HOME.	76	19	4	75	18	6
15.	I GET PRAISE AT HOME FOR GOOD SCHOOLWORK.	77	9	13	71	17	11
18.	MY PARENTS ARE INTERESTED IN WHAT I DO IN SCHOOL.	94	1	4	90	3	5
NON-FACTORABLE ITEMS							
3.	READING LIBRARY BOOKS HELPS ME IN MY SCHOOLWORK.	59	26	14	60	22	16
11.	STUDENTS IN MY SCHOOL GET ALONG PRETTY WELL TOGETHER.	43	39	16	51	29	18
14.	SOMEONE FROM HOME HAS TALKED TO MY TEACHER(S) THIS SCHOOL YEAR.	72	20	6	63	29	7
16.	I THINK I WILL GRADUATE FROM HIGH SCHOOL.	84	2	12	80	4	15
19.	I READ MORE THAN IS REQUIRED BY MY SCHOOLWORK.	45	33	21	40	40	18

$ TOTAL PERCENTAGES DO NOT ALWAYS EQUAL 100 % DUE TO RESPONDENTS' OMISSIONS.
* REFER TO INTERPRETIVE MEMO

CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

TEACHER SURVEY
DATE ADMINISTERED - APRIL, 1972

		NO. OF RESPONSES PER RATING (POOR 1 2 — AVERAGE 3 4 5 — EXCELLENT 6 7)	YOUR SCHOOL AVERAGE RATING N = 14	AVERAGE OF ALL ELEMENTARY SCHOOL TEACHERS N = 1,625
FACTOR I	STAFF MORALE			
ITEM #	ITEMS COMPRISING ABOVE FACTOR			
6.	MY VIEW OF TEACHER APPRAISAL SYSTEM.	2 1 3 5 1 2 0	3.57	3.14
17.	ATTENDANCE REGULARITY OF MY FELLOW TEACHERS.	0 0 2 6 2 2 2	4.71	5.06
20.	SATISFACTION WITH MY TEACHING ASSIGNMENT.	0 0 1 2 1 4 6	5.85	5.40
23.	COOPERATION AMONG TEACHERS IN MY SCHOOL.	1 0 1 4 0 5 3	5.07	4.84
30.	GENERAL QUALITY OF TEACHING IN MY SCHOOL.	0 0 0 4 5 3 2	5.21	5.20
31.	UNDERSTANDING OF MY RESPONSIBILITY IN THE SCHOOL.	0 0 0 2 1 7 4	5.92	5.58
34.	STAFF MORALE IN MY SCHOOL.	1 0 1 6 4 1 1	4.35	4.19
37.	ADMINISTRATIVE HELP IN SCHOOL WITH DISCIPLINE PROBLEMS.	0 1 1 1 2 5 4	5.50	4.54
42.	TEACHER-PRINCIPAL COOPERATION.	0 0 0 2 1 2 7	6.16	5.11
47.	MY INVOLVEMENT IN DECISIONS AFFECTING ME.	0 0 2 6 4 2 0	4.42	4.08
48.	SYSTEM'S APPRECIATION OF MY CONTRIBUTION.	0 1 1 6 4 1 1	4.42	3.71
50.	VALUE OF STAFF MEETINGS IN MY SCHOOL.	0 0 0 6 2 4 2	5.14	4.16
		FACTOR AVERAGE	5.03	4.58
FACTOR II	SPECIAL EDUCATION NEEDS			
ITEM #	ITEMS COMPRISING ABOVE FACTOR			
12.	ADEQUACY OF COUNSELING SERVICES.	5 6 2 0 0 1 0	2.07	2.29
14.	ADEQUACY OF PSYCHOLOGICAL SERVICES.	1 3 2 6 1 1 0	3.42	3.07
16.	SCHOOL'S PROVISION FOR PUPIL'S HEALTH.	3 1 5 3 2 0 0	3.00	3.20
21.	PROVISIONS FOR THE PHYSICALLY HANDICAPPED CHILD IN MY SCHOOL.	5 2 3 2 1 0 1	2.71	2.28
22.	PROVISIONS FOR THE SOCIALLY MALADJUSTED CHILD IN MY SCHOOL.	6 5 1 1 1 0 0	2.00	2.08
25.	PROVISIONS FOR THE EDUCABLE MENTALLY RETARDED IN MY SCHOOL.	1 2 3 3 1 2 2	4.07	2.90
45.	CURRICULUM IN MY SUBJECT AREA FOR DISADVANTAGED PUPILS.	1 1 4 4 3 0 1	3.78	3.14
46.	PROVISIONS FOR THE EMOTIONALLY DISTURBED CHILDREN IN MY SCHOOL.	6 4 2 1 1 0 0	2.07	2.02
		FACTOR AVERAGE	2.89	2.62
FACTOR III	PUPIL CHARACTERISTICS			
ITEM #	ITEMS COMPRISING ABOVE FACTOR			
10.	STUDENTS IN THE SCHOOL GET ALONG PRETTY WELL TOGETHER.	4 3 3 3 1 0 0	2.57	3.92
11.	SELF-IMAGE OF MY PUPILS.	0 2 2 4 2 4 0	4.28	4.14
18.	BEHAVIOR OF PUPILS IN MY SCHOOL.	4 3 3 3 1 0 0	2.57	3.66
28.	PUNCTUALITY OF MY PUPILS.	0 2 2 6 3 1 0	3.92	4.05
29.	ASPIRATION LEVEL OF MY PUPILS.	0 2 3 6 2 1 0	3.78	3.86
38.	FREEDOM FROM PHYSICAL THREAT IN AND AROUND MY SCHOOL.	1 1 0 5 2 4 1	4.57	4.78
44.	GENERAL ACHIEVEMENT OF MY PUPILS.	0 1 4 5 1 3 0	4.07	4.09
		FACTOR AVERAGE	3.68	4.07

* YOUR TEACHERS' RESPONSES TO THESE ITEMS WERE SIGNIFICANTLY DIFFERENT FROM THE AVERAGE OF ALL RESPONDENTS.
(SEE INTERPRETIVE MEMO)

ESEA TITLE III

CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM

DIVISION OF PROGRAM RESEARCH & DESIGN

PARENT SURVEY

DATE ADMINISTERED - MAY 1972

	YOUR SCHOOL UNIT N= 184			ALL ELEMENTARY SCHOOL UNITS N=25,013		
	% YES	% NO	% UNDECIDED	% YES	% NO	% UNDECIDED
SCHOOL ATMOSPHERE						
ITEM # ITEMS COMPRISING THE ABOVE CATEGORY						
1. DO YOU FEEL WELCOME AT THE SCHOOL YOUR CHILD ATTENDS.	95	0	3	92	2	4 **
4. DO YOU FEEL FREE TO CALL THE TEACHER OR SOMEONE ELSE AT SCHOOL IF YOU HAVE A QUESTION OR PROBLEM.	96	0	1	90	6	2
8. HAVE YOU TALKED TO ANY OF YOUR CHILD'S TEACHERS OR THE PRINCIPAL DURING THE SCHOOL YEAR.	89	10	0	86	12	0
SCHOOL PROGRAM QUALITY						
ITEM # ITEMS COMPRISING THE ABOVE CATEGORY						
2. HAS YOUR CHILD'S SCHOOL FAILED TO TEACH WHAT YOU THINK SHOULD BE LEARNED.	16	61	19	10	77	10
3. ARE YOU DISSATISFIED WITH THE QUALITY OF TEACHING AT YOUR CHILD'S SCHOOL.	22	63	12	14	74	10
7. HAS THE SCHOOL DONE A GOOD JOB OF TEACHING YOUR CHILD BASIC SKILLS SUCH AS READING AND WRITING.	72	15	10	77	9	10
* 13. IF YOU COULD SEND YOUR CHILD TO ANY OTHER PUBLIC SCHOOL IN THE CITY, WOULD YOU CHOOSE TO DO SO.	38	42	16	18	68	11
* 16. DO YOU BELIEVE THE PRINCIPAL'S OFFICE IN YOUR CHILD'S SCHOOL IS DOING A GOOD JOB.	53	18	24	76	6	16
SCHOOL PUPIL RELATIONS						
ITEM # ITEMS COMPRISING THE ABOVE CATEGORY						
6. DOES YOUR CHILD USUALLY DISLIKE GOING TO SCHOOL.	9	84	5	9	86	2
10. DO YOU THINK YOUR CHILD IS TREATED UNFAIRLY AT SCHOOL.	7	77	13	7	86	7
11. DO YOU BELIEVE YOUR CHILD'S TEACHERS TAKE A PERSONAL INTEREST IN (HIM,HER).	65	15	18	64	17	17
18. DO YOU FEEL YOUR CHILD IS SAFE AT SCHOOL.	72	13	13	75	11	11
EDUCATIONAL ISSUES						
ITEM # ITEMS COMPRISING THE ABOVE CATEGORY						
5. DO YOU FEEL THAT YOU ARE POORLY INFORMED OF YOUR CHILD'S PROGRESS IN SCHOOL.	20	70	7	16	75	6
9. SHOULD IT BE THE RESPONSIBILITY OF THE BOARD OF EDUCATION TO ACHIEVE RACIALLY BALANCED SCHOOLS.	50	16	29	33	39	24
* 12. SHOULD STUDENTS HAVE A STRONGER VOICE IN SCHOOL AFFAIRS.	59	11	25	35	38	23
14. SHOULD PARENTS HAVE A STRONGER VOICE IN WHAT THE SCHOOLS ARE TEACHING.	58	14	23	48	25	24
15. ARE YOU IN FAVOR OF STRONGER STUDENT DISCIPLINE.	71	8	17	66	17	13
17. DO YOU FEEL THAT CUTBACKS IN THE SCHOOL SYSTEM'S BUDGET HAVE REDUCED THE QUALITY OF YOUR CHILD'S EDUCATION.	52	22	20	43	36	19

**TOTAL PERCENTAGES ARE NOT ALWAYS EQUAL TO 100% DUE TO RESPONDENTS' OMISSIONS

ESEA TITLE III

CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

MAY-1972

GOAL SURVEY

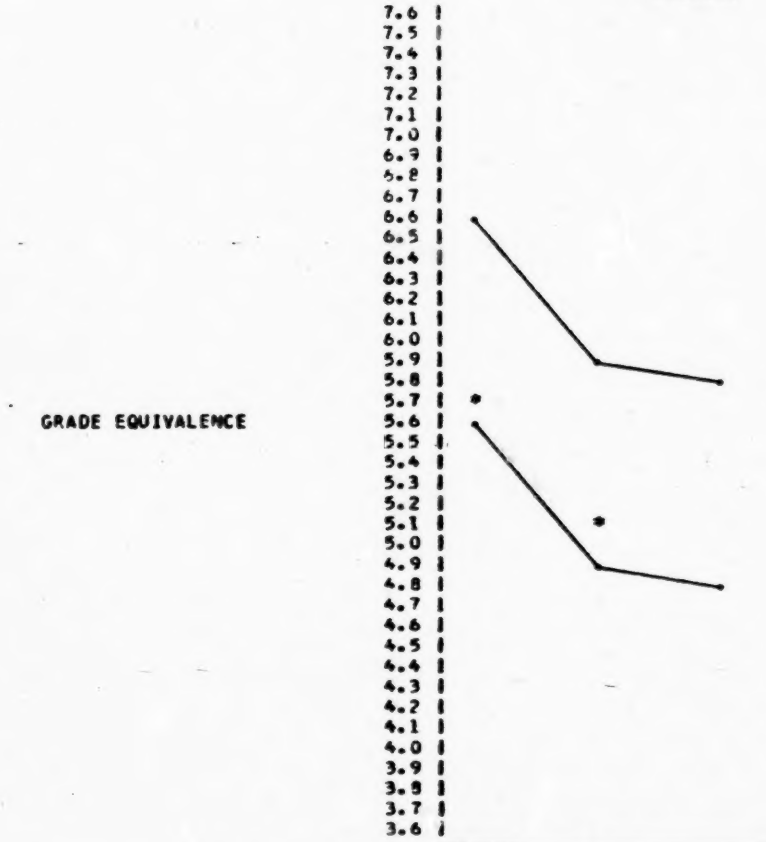
PERCENTAGE BY GROUP SELECTING EACH GOAL

GOALS	STUDENT SCHOOL UNIT	STUDENT ELEMENTARY SYSTEM	TEACHER SCHOOL UNIT	TEACHER ELEMENTARY SYSTEM	ALL ADMINISTRATORS ELEMENTARY SYSTEM TOTAL	PARENTS SCHOOL UNIT	PARENTS ELEMENTARY SYSTEM
NUMBER RESPONDING	N = 46	5,026	N = 14	1,612	N = 90	N = 184	25,013
GOOD HEALTH	65 %	52 %	14 %	28 %	16 %	33 %	31 %
CITIZENSHIP	26 %	40 %	57 %	48 %	53 %	52 %	49 %
IMPROVEMENT OF BASIC SKILLS	21 %	48 %	28 %	74 %	90 %	70 %	72 %
JOB TRAINING	67 %	60 %	14 %	18 %	24 %	30 %	27 %
SELF - DEVELOPMENT	21 %	24 %	78 %	58 %	56 %	40 %	46 %
TALENT DEVELOPMENT	50 %	30 %	0 %	14 %	15 %	20 %	28 %
LEISURE TIME ACTIVITIES	26 %	26 %	0 %	11 %	3 %	11 %	9 %
SCIENCES	10 %	27 %	7 %	11 %	10 %	21 %	28 %
UNDERSTANDING OTHER PEOPLE	36 %	39 %	57 %	47 %	60 %	59 %	40 %
HOME AND FAMILY LIVING	5* %	38 %	28 %	13 %	8 %	5 %	* %
CHARACTER BUILDING	23 %	18 %	71 %	61 %	50 %	46 %	41 %

E S E A T I T L E I I I
C I N C I N N A T I P U B L I C S C H O O L I N F O R M A T I O N S Y S T E M
DIVISION OF PROGRAM RESEARCH & DESIGN

ACHIEVEMENT FORECAST
1972-73 SCHOOL YEAR

SIXTH GRADE
READING

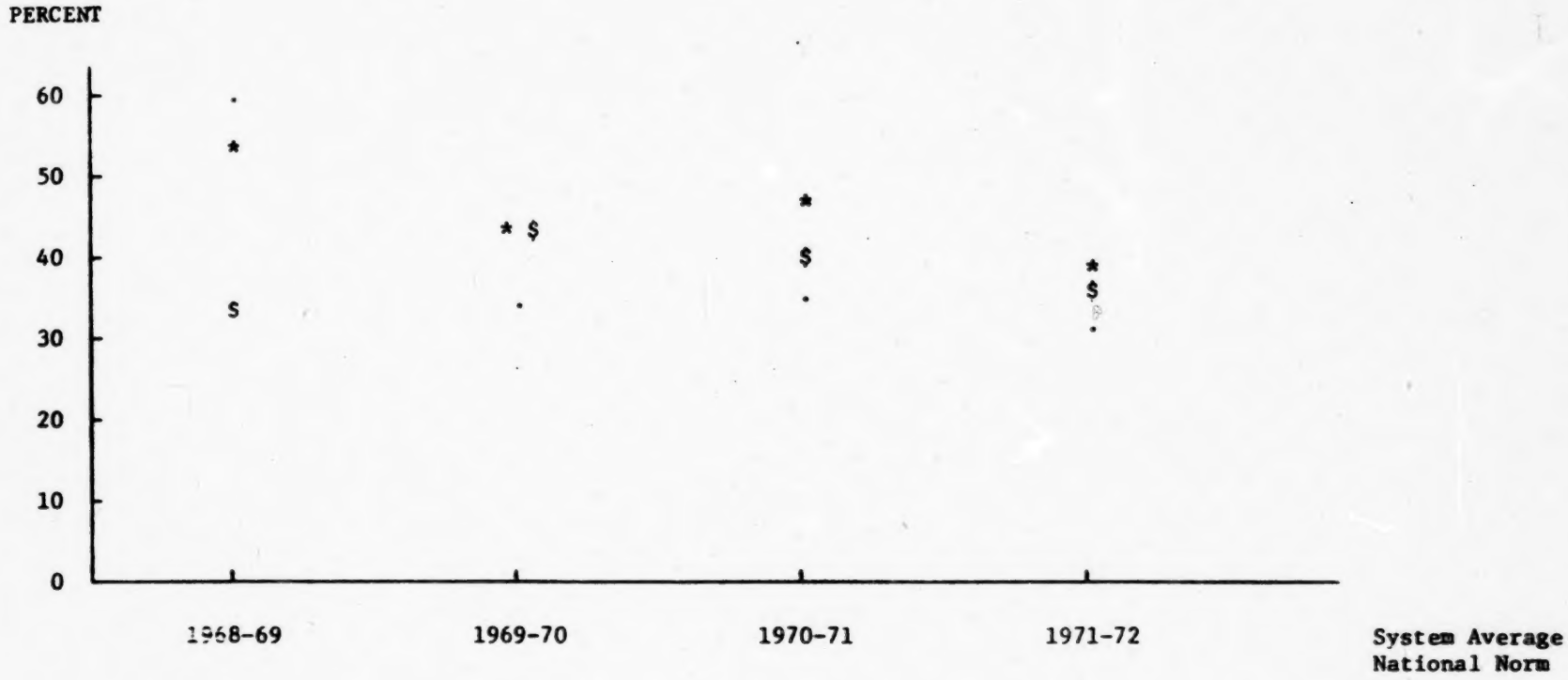


YEAR	70-71	71-72	72-73
CINCINNATI PUBLIC SCHOOL SYSTEM AVG	5.1	4.9	
NATIONAL NORM	6.3	6.3	

LEGEND
—— PREDICTION AREA FOR YOUR SCHOOL
* YOUR SCHOOL'S ACTUAL ATTAINMENT

ESEA TITLE III
CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

Trend Report



LEGEND: · Percent on welfare

* Percent free lunches

$ Percent voting

NOTE: Lack of one symbol indicates no data for that year

APPENDIX B

Evaluation Report for SIS Training Sessions

August 21-25, 1972

SUMMATIVE EVALUATION REPORT

Using Information for Decision Making

SIS Management Training Program

August 21-25, 1972

CINCINNATI PUBLIC SCHOOLS
Division of Program Research and Design

SUMMATIVE EVALUATION REPORT

Using Information for Decision Making

SIS Management Training Program
August 21-25, 1972

INTRODUCTION

Purpose

Aim of Report. This report presents the summative evaluation of the management training program conducted for principals and assistant principals of the Cincinnati Public Schools by the staff of the School Information System (SIS). The information presented here is intended to provide a comprehensive evaluation of the program. It should serve any and all decision makers who need information connected with any of the purposes set down in the evaluation plan. It should also provide, for the participants and any other interested persons, detailed perspective on the degree to which the training program accomplished its objectives.

Purposes of Evaluation. Four distinct purposes for evaluating the training program were set down in the evaluation plan devised as the training program was formulated. These were:

1. To disclose specific needs for post-program inservice training of administrators by indicating deficiencies in the accomplishment of program objectives.
2. To assess the extent to which principals accept and understand the School Information System.
3. To suggest program modifications that are likely to improve the quality of the program as it is replicated for other audiences.
4. To provide adequate process evaluation to insure that any concurrent program modifications that are crucial will be made known to the program administrators.

The order in which these four purposes are listed was seen as indicative of their priority. In other words, determining post-program inservice training needs was seen as the most important purpose, while process evaluation directed to immediate program modifications was considered least important.

Plan of Report

Major Divisions. This report is organized into five major divisions: Introduction, Evaluation by Subgoal, Total Program Evaluation, Conclusions, and Recommendations. After this introduction has presented the rationale and organization of the report, the next two sections will report evaluation results. The second division of the report will look separately at each of the eight subgoals of the training program. Data collected through the various evaluation instruments will be presented to indicate the degree of success in achieving the objectives under each subgoal.

In the third division of the report, information related to evaluation of the overall program will be discussed. The chief emphasis of this section will be on the process information provided to the directors in the course of the training program. While the section on subgoals will serve primarily the first evaluation purpose stated above, this global evaluation section will be directed to the second, third, and fourth purposes.

The evaluation plan set down the three product instruments that were used to collect information for evaluation. These were:

a. Participants' Ratings (post only)--current level of understanding, increase of understanding, worthwhileness of program components.

b. Content Test (pre and post)--checklists, true-false.

c. Test Simulation (pre and post)--true-false and rating questions based on selected data for a hypothetical school.

In addition, two techniques were designated for gathering process information. Members of the evaluation staff were assigned to interact with program participants, especially during coffee breaks. A suggestion box was provided, through which participants could submit comments at any time. These process techniques proved helpful in gathering evaluative data.

Subgoals. The eight subgoals of the program were as follows:

1. To provide principals an opportunity to review and apply 1971-72 SIS data to specific task situations.
2. To assist principals in acquiring a functional knowledge of SIS.
3. To assist principals in the use of SIS data for decision making relating to goal setting and problem identification.
4. To assist principals in the utilization of SIS data in program evaluation.
5. To assist principals in the interpretation and use of the Student, Teacher, and Parent Surveys.
6. To assist principals in communicating information to staff, students, and the public.
7. To provide knowledge about the nature and qualities of decisions and information.
8. To show the relation between SIS reports and accountability.

EVALUATION BY SUBGOAL

1. Application to Task Situation

Objective a. All principals attending the training program will participate in the application of a task situation to their 1971-72 SIS reports--NOT ACHIEVED.

The final day of the program featured an opportunity for participants to engage in an extended analysis of their individual school reports. An

exercise was provided to guide them in their study of the data. This component was viewed by the program planners as the culminating activity of the entire week.

Unfortunately, computer programming difficulties made it impossible to have the senior high school reports ready. Members of the SIS staff worked throughout the night to remedy the difficulties, but to no avail. Thus, although a large majority of the administrators in attendance participated in the exercise, non-availability of the senior high school reports must be considered a serious shortcoming.

Objective b. On the participants' rating instrument, this activity will rank among the three program components seen as most useful--ACHIEVED.

The participants' rating instrument, administered at the close of the workshop, asked administrators to rate each of 15 program components. The ratings, based on a five-point scale, were to reflect the respondents' judgments of the usefulness of what they had learned from each component. The mean rating given each component by elementary and secondary administrators is shown in Appendix Table 1.

Elementary participants gave the culminating exercise a mean rating of 4.01; secondary administrators rated it 4.09. These means indicate that the respondents saw the analysis of the individual school printouts as the single most useful program component. Interestingly, the mean rating by the secondary administrators was slightly higher than that by the elementary group, despite the fact that the senior high school reports were not available for this exercise. It should be noted that several of the senior high school group simply did not respond to this item.

2. Functional Knowledge of SIS

Objective a. On a checklist of real and fictitious variables on the content test, the number correctly identified as those in SIS will show some increase from pre- to post-test. Further, the number correctly identified by individual participants will increase for at least 75 per cent of the respondents--ACHIEVED.

Three of 15 program components were oriented primarily to giving principals a functional knowledge of SIS, i.e., increasing their understanding of what the information system contains and what this information means. The relevant section of the content test listed ten variables, seven real and three fictitious. Without knowing the correct number, respondents were to identify those actually contained in SIS. Each item in the list was scored as correctly or incorrectly designated.

On the average, elementary participants correctly designated 6.41 of the ten variables on the pre-test and 8.65 on the post-test. For the secondary group, the increase was from 5.33 to 8.00. Seventy-eight per cent of the elementary participants and 84 per cent of the secondary showed an improvement in scores.

Objective b. Given a checklist of questions that one might try to answer with SIS data, participants will be more successful on the post-test than on the pre-test, in selecting those that can actually be answered. Increase in the mean and improvement for 75 per cent of the participants will be used as criteria--NOT ACHIEVED.

A second section of the content test consisted of a list of six questions, of which three could actually be answered with SIS data. Administration and scoring of this section corresponded to the procedures applied to the checklist of variables. Of the six questions listed,

elementary principals correctly designated an average of 3.07 on the pre-test and 3.22 on the post-test. Secondary means were 2.85 and 3.17 on pre- and post-test, respectively. However, only 40 per cent of the elementary and 48 per cent of the secondary respondents showed a gain for this section.

Objective c. Participants' ratings of the program components related to functional knowledge of SIS will yield a mean at or above the mid-point of the scale--ACHIEVED.

In general, the administrators participating in the program rated the components related to this subgoal above 3.00, the mid-point of the scale. The mid-point was labeled to indicate a judgment that the knowledge gained was "fairly useful."

Second ranked among the 15 program components was the exercise of the second day in which participants engaged in an interpretation of data on a hypothetical school. Secondary principals rated this activity on par with the analysis of their own schools' reports. Their ratings averaged 4.10, compared to 3.82 for the elementary group.

A fourth-day address by Dr. Harry Smith, Dean of the School of Management, Rensselaer Polytechnic Institute, was also associated with this subgoal. This speech, entitled "Potential and Limitations of SIS and Some Guidelines for Interpretation," followed a panel discussion by several community leaders. Elementary participants rated Dr. Smith's address 3.77, while secondary ratings averaged 3.69. This speech ranked seventh among the 15 components.

The third component associated with this subgoal was an address by Dr. Robert P. Curry, Deputy Superintendent of Schools. At the opening of the program, Dr. Curry discussed the development and service function of SIS. With mean ratings of 2.90 and 3.08 by elementary and secondary participants, respectively, this address ranked fourteenth among the program components. The average elementary rating was one of three means (among all components) that fell below the scale's mid-point.

3. Goal Setting and Problem Identification

Objective a. In the test simulation, there will be an increase from pre- to post-test in the mean number of correct responses to items involving the use of data in goal setting--ACHIEVED.

The test simulation, which participants completed before and after the program, included a set of hypothetical data and a variety of related questions. On the five items concerning the use of data in goal setting, elementary principals increased their average number of correct responses from 3.93 on the pre-test to 4.15 on the post-test. The increase for secondary administrators was from 3.02 to 3.83.

Objective b. In the test simulation, participants' rating of five equally valued goals on the basis of a comparison between hypothetical school data and city-wide averages will show closer agreement with judges' ratings on the post-test than on the pre-test--ACHIEVED.

Prior to the training program, a panel of four judges ranked the five goals listed on the test simulation. Their rankings showed reasonable reliability, with unanimity on the highest and lowest priorities.

The participants' mean ranks were compared with the judges' means. The objective called for the differences between the participants' rankings and judges' rankings to decrease from pre- to post-test. The results are shown in Table 1.

Table 1. Differences Between Mean Ranks Assigned to Goals by Participants and Judges.

Goal	Elementary Pre	Elementary Post	Secondary Pre	Secondary Post
Improved school-community relations	.95	.58	1.18	.47
Improved staff morale	.99	.88	1.11	.92
Improved student attitudes	1.00	.51	1.44	.56
Improved reading achievement, primary	1.05	.95	1.29	.96
Improved reading achievement, junior high	.98	.51	1.01	.72

The differences reported in Table 1 indicate accomplishment of this objective. Pre-test differences were fairly consistently 1.0, while those on the post-test ranged from .47 to .96, with a mean of .71.

Objective c. On the content test, there will be an increase from pre- to post-test in the mean number of correct responses to items concerned with various needs identification techniques--ACHIEVED.

The third related objective called for an increase from pre- to post-test in the number of correct responses on relevant items on the content test. The four items in this category show a mean increase from 3.17 to 3.25 among elementary administrators and from 3.10 to 3.40 among secondary administrators. Again, the objective was achieved.

Objective d. Participants' ratings of program components related to goal setting and problem identification will yield a mean at or above the mid-point of the scale--ACHIEVED.

Three components were directed toward the accomplishment of the subgoal related to goal setting and problem identification. Both the elementary and secondary groups rated all three components higher than 3.00. Compared with other presentations and activities, though, these three components were

less well received than most, ranking ninth, tenth, and twelfth among the 15 components.

A group-decision-making exercise, based on the Ohio Riot Commission Report, was presented near the end of the first day. Elementary participants rated the usefulness of what they learned from this exercise at 3.30. The secondary mean was 3.56.

Ranking slightly behind the group decision making exercise was the goal setting simulation of the third day. Consistent with nearly all other ratings, secondary participants (3.53) saw the exercise as having somewhat greater utility than elementary administrators (3.19).

Finally, a second-day address by Mr. Bernard M. Barbadora, Manager of the School Information System, built on the exercise in group decision making and emphasized key principles. The mean ratings for this component were: elementary, 3.05; secondary, 3.32.

4. Program Evaluation

Objective a. In the test simulation, there will be an increase from pre- to post-test in the mean number of correct responses to items concerned with evaluating a program of non-gradedness based on hypothetical school data--ACHIEVED.

Five items in the test simulation pertained to the use of SIS data in program evaluation. Elementary principals answered an average of 3.00 correctly on the pre-test and 3.44 on the post-test. The secondary mean increased from 3.16 to 3.70.

Objective b. On the content test, there will be an increase from pre- to post-test in the mean number of correct responses to items concerned with the role of program evaluation in local school program development--ACHIEVED.

Similar success was achieved with regard to the second program evaluation objective, which called for a mean increase among four items on the

content test. Here the elementary mean went up from 2.06 to 2.70, and the secondary from 2.14 to 3.06.

Objective c. Participants' ratings of program components concerned with program evaluation will yield a mean at or above the mid-point of the scale--ACHIEVED.

Only one component dealt primarily with using SIS for program evaluation. This was a third-day address by Dr. Joseph L. Felix, Associate Director of the Division of Program Research and Design. Elementary administrators gave this presentation a mean rating of 3.87, and secondary administrators, 4.02. These means ranked Dr. Felix's address fourth among the 15 program components.

5. Interpreting and Using Surveys

Objective a. In the test simulation there will be an increase from pre- to post-test in the mean number of correct responses to items concerned with the use of survey data in goal setting--ACHIEVED.

Four of the five true-false goal-setting items in the test simulation were based on the use of survey data. All four showed an increase from pre- to post-test in the percentages of correct answers given by both elementary and secondary participants.

Objective b. In the test simulation, there will be an increase from pre- to post-test in the mean number of correct responses to items concerned with the use of survey data in evaluating a program of non-gradedness--NOT ACHIEVED.

Only one of the five program evaluation items in the test simulation was linked to survey data. This was a controversial item on which even the program coordinators disagreed. Although there was an increase in the percentage of elementary participants answering the item according to the keyed response (21% to 24%), the secondary percentage declined (50% to 38%).

Objective c. On the content test, there will be an increase from pre- to post-test in the mean number of correct responses to items concerned with the use of survey data--ACHIEVED.

Four content test items focused directly on the interpretation and use of surveys. Of these, the elementary group answered an average of 2.89 correctly on the pre-test and 3.38 on the post-test. The secondary mean increased from 2.86 to 3.40. This objective was attained successfully.

Objective d. Participants' ratings of program components concerned with the use of survey data will yield a mean at or above the mid-point of the scale--ACHIEVED.

One of the few components that received a higher rating from elementary than from secondary administrators was the fifth day's presentation on the use of surveys. This was the only component related primarily to this subgoal. Secondary principals rated this presentation slightly below the scale's mid-point (2.88). The elementary rating, however, (3.08) raised the total mean for both groups above 3.00, so that the objective was achieved.

6. Communicating Information

Objective a. Participants' ratings of program components concerned with communicating information will yield a mean at or above the mid-point of the scale--ACHIEVED.

Two components were related primarily to techniques for communicating information. Ratings given to both presentations by elementary and secondary groups were comfortably above the mid-point of the scale.

Fifth-ranked among the 15 components was the panel discussion, "What the Public Wants to Know." The mean secondary rating for this component (4.08) is nearly as high as those for the top-ranked exercises on analyzing and interpreting SIS reports. Elementary participants gave a mean rating of 3.73 to the panel discussion.

Ranking eleventh was the dramatic presentation of the third day coordinated by Miss Joan Bollenbacher, Director of the Division of Evaluation Services. Mean ratings were: elementary, 3.20; secondary, 3.29.

Objective b. At the close of the training program, participants, on the average, will rate their current level of understanding of communication techniques suited to staff, students, parents, and other community members as at least adequate for present purposes--NOT ACHIEVED.

None of the cognitive measures contained on the test simulation or content test related to understanding of communication techniques. Because of the relatively low priority of this subgoal, the evaluation was based entirely upon the ratings given by participants at the close of the workshop. On one section of the participants' ratings instrument, administrators were asked to evaluate their knowledge. For each area, they indicated how adequate they felt their current understanding to be and how much their knowledge had increased in the course of the training program. Adequacy of current understanding was rated on a three-point scale, while increase of knowledge was rated on a seven-point scale.

For the communication techniques content area, the ratings of both elementary and secondary participants fell slightly below the mid-point of the scale. Elementary administrators gave a mean rating of 1.87; secondary, 1973. Thus, the ratings of both groups averaged somewhat below the standard of "adequate for present purposes."

Objective c. Participants' ratings of their increase of understanding of communication techniques will yield a mean equal to or greater than the minimum predicted mean for a measurable increase. The prediction formula will be derived from the regression of the ratings of increased understanding, on pre-post content test differences in subgoals 2 through 5--NOT ACHIEVED.

The portion of the participants' ratings instruments on which they were asked to judge their increase of knowledge was developed in an attempt to compensate for the lack of cognitive measures related to the last three subgoals. Because both pre-post cognitive measures and judgments of knowledge increase were available for subgoals 2 through 5, the plan was to relate these two measures to each other and develop a regression equation which would help establish a minimum standard for estimates of knowledge increase. This standard was based on a cognitive-measure increase of one point. It was computed separately for the elementary and secondary groups.

For elementary administrators, the minimum standard established through the regression equation was 4.64; the rating given knowledge increase in communication techniques was 4.34. For the secondary group, the regression equation set the minimum standard at 4.72; the rating for this area was 4.29.

It should be noted, however, that the validity of the above comparison is limited by the low correlation between measured cognitive increases and participants' ratings. For the elementary group, this correlation was .07, and for the secondary, .32.

In this light, one might ask how participants perceived the knowledge increase in this area as compared to that for the areas under subgoals 2 through 5. This means of evaluating the ratings yields still less favorable results. The average rating of knowledge increase for the other four areas was 4.71 for elementary participants and 4.97 for secondary participants. It can safely be said, therefore, that participants felt they had gained less knowledge in this area than those under subgoals 2 through 5.

7. Nature and Qualities of Decisions and Information

Objective a. Participants' ratings of program components related to decisions and information will yield a mean at or above the mid-point of the scale--ACHIEVED.

Three of the 15 components were directed primarily toward the accomplishment of this subgoal. In general, the average rating of these three components were above the 3.00 mid-point.

Dr. Harry Smith presented an address entitled "Management Information Systems as They Relate to School Administrators." This speech was given on the fourth day, prior to the panel discussion. Elementary participants gave the presentation an average rating of e.72, while the secondary mean was 3.96 This address ranked sixth among the 15 components.

Dr. James Jacobs, Director of the Division of Program Research and Design, spoke on "Principles of Using Information" on the second day of the training program. Elementary participants rated his presentation 3.45, while the secondary administrators gave it 3.59. Dr. Jacobs' address ranked eighth among the 15 program components.

Lowest ranked of the 15 program components was an address by Mr. John Faust, Assistant Superintendent of the Cincinnati Public Schools. Mr. Faust's speech, given on the fifth day, was entitled "The Relation of SIS to a Management Model." The elementary rating for this component was 2.56; secondary administrators rated it 3.00.

Objective b. At the close of the training program, participants, on the average, will rate their current level of understanding of the nature and qualities of decisions and information at least adequate for present purposes--ACHIEVED.

On the three-point scale used for rating current level of understanding, elementary principals rated the area of the nature and qualities of decisions and information at 1.95. The mean secondary rating was 1.98. Because both ratings are within .05 of the scale's mid-point it seems reasonable to judge that this objective was successfully achieved.

Objective c. Participants' ratings of their increase of understanding of the nature and qualities of decisions and information will yield a mean equal to or greater than the minimum predicted mean for a measurable increase--NOT ACHIEVED.

Using the method described under objective c of subgoal 7, participants' ratings of their increase of understanding in this area were compared with the minimum standard derived from the regression equation. With a minimum standard of 4.64, the elementary group rated their knowledge increase 4.36. The standard for the secondary group was 4.72, and the mean rating for this area was 4.37.

8. Accountability

Objective a. Participants' ratings of program components concerned with accountability will yield a mean at or above the mid-point of the scale--ACHIEVED.

Only one component was directed primarily to the subgoal. This was an address by Dr. Donald R. Waldrip, Superintendent of the Cincinnati Public Schools, on the third day of the training program. This presentation ranked third among the 15 program components, receiving higher ratings than any other speaker-to-audience presentation. Elementary participants gave Dr. Waldrip's address an average rating of 3.88. The secondary mean was 4.02.

Objective b. At the close of the training program, participants, on the average, will rate their current level of understanding of accountability as at least adequate for present purposes--ACHIEVED.

On the three-point scale used for assessing adequacy of current understanding, elementary principals gave a mean rating of 1.99 to their knowledge of accountability. The secondary mean was 2.11. The average rating for both groups may be said to have achieved the mid-point of the scale which was described as "adequate for present purposes."

Objective c. Participants' ratings of their increased understanding of accountability will yield a mean equal to or greater than the minimum predicted mean for a measurable increase--NOT ACHIEVED.

With a minimum standard of 4.72, secondary principals rated their increase of knowledge of accountability at 4.41. Elementary principals, on the other hand, gave the mean rating of 4.79, compared to a minimum standard of 4.64. Specifically, then, this objective may be said to have been accomplished for the elementary group but not for the secondary. The mean rating among all participants, however, was less than the minimum standard for the total group.

TOTAL PROGRAM EVALUATION

Product Instruments

Total Scores. Frequency distributions were made of the total scores achieved by elementary and secondary participants on the test simulation and content tests. Scores were based on 38 items across these two instruments for which responses could be designated correct or incorrect. On these 38 items, 60 elementary administrators who took complete pre- and

post-tests gained an average of 5.4 from pre- to post-tests. Their mean pre-test score was 21.6, and their mean post-test score was 27.0. Forty-one secondary participants with complete tests averaged 19.7 on the pre-test and 27.3 on the post-test for a mean gain of 7.6.

Quartiles were also computed for the frequency distributions. These are shown in Table 2.

Table 2. Quartiles in the Distribution of Scores on Cognitive Measures, by Group and Test Administration (k=38).

	Elementary		Secondary	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Q_3	26.7	30.9	25.8	31.2
Q_2	24.1	28.5	21.2	28.5
Q_1	16.8	25.5	15.3	25.0

Component Ratings. To evaluate the various components of this training program in terms of the desirability of including similar material in future replications, a summary of the ratings given to the various components might be helpful. Such a summary is provided in Appendix Table 1.

This summary reveals quickly what has been spelled out at length in the evaluation of program subgoals. Participants were generally very satisfied with the quality of the program components. All 15 components were rated by at least one of the two groups at or above the mid-point of the scale. Thirteen of them had total means above the mid-point. Based upon these ratings, none of the components appears unworthy of consideration for possible inclusion in future programs.

Process Techniques

Interaction with Evaluators. Members of the evaluation staff of the Division of Program Research and Design were assigned to interact with program participants, chiefly at coffee breaks, throughout the week. Each evaluator submitted a brief written report of comments received and observations made.

The general tenor of these reports throughout the week was highly favorable. Attitudes of the participants toward the program seemed to develop somewhat according to the following description: first day--wait and see; second day--not bad; third day--well planned with good content; fourth day--one of the best workshops ever attended.

Specific process information was given to the program coordinators at the conclusion of each day. There is no need to repeat the details here. Principals saw the content of the program as worthwhile. They were very impressed by several of the speakers. They felt that the entire program was well thought out.

Two negative themes that appeared with some frequency in the evaluators' reports deserve mention. Most common was an unfavorable reaction to the time of year when the program was held. Principals were disturbed by an awareness that some important tasks related to preparing for the opening of school were being left unattended. As one evaluator noted, however, participants who were questioned about a more desirable time were unable to offer a practical suggestion.

The second negative theme was an infrequent expression that there seemed to be some redundancy in program content. A few of the random evaluative comments suggested that some time could be saved and the program

made more compact if repetition were eliminated and the program offered for full days rather than half days.

Suggestion Box. In the suggestion boxes made available to program participants, a total of 20 entries were submitted during the course of the program. Eight of these contained suggestions for improving the data printouts offered by SIS. Five others made suggestions for the workshop itself (interestingly, only one related to the time of year at which the program was offered). Two of the suggestion box submissions provided general, positive evaluative comments on the workshop. Two others were requests to check the accuracy of data on individual schools. Three miscellaneous comments were submitted.

The following selected ideas represent the most useful material from the suggestion box:

-- more systematic input from principals to SIS

-- appointment of principals' liaison to Program Research and Design

-- comparison among schools of equal SES

-- longitudinal comparison for each school to indicate trends

-- provision of multiple copies of printouts to schools

-- table of contents to locate specific areas of data

-- listing the page number of the data behind each exceptional characteristic

-- use of the same unit of measurement throughout the printouts

-- offering a comparable workshop for teachers using closed-circuit TV on inservice day.

CONCLUSIONS

From the evaluation of each program subgoal and that of the total workshop it is possible to draw several conclusions.

1. In general, the training program may be labeled a highly successful inservice effort. Eighteen of the 25 evaluative objectives were achieved. These included at least one objective under each of the eight subgoals.

2. Non-delivery of the senior high school reports was the most serious deficiency of the program. For all of the other six objectives that were not achieved, the success criterion was missed by a narrow margin. In general, these objectives also represent the weakest areas of instrumentation.

3. All objectives were accomplished under two subgoals. The training program proved most successful in achieving the objectives related to goal setting and problem identification (subgoal 3) and program evaluation (subgoal 4).

4. The areas seeming most in need of follow-up attention are the application of SIS data, functional knowledge of the system, and communication techniques.

5. Total evaluation results point to a high degree of acceptance of SIS. The attitudes of the participants appeared to grow increasingly favorable in the course of the training program. The perception that the workshop contributed to their effectiveness as administrators almost certainly made participants' attitudes toward SIS more strongly positive.

6. None of the 15 program components was rated so low as to dictate its being eliminated from future replications. Each component was rated at or above the mid-point of the scale by at least one of two groups.

7. Process techniques used in evaluation contributed to the assurance that the workshop was seen as useful by the participants. In addition to the several suggestions for minor modifications during the program, the process evaluation yielded several constructive ideas for modifying SIS reports and future workshop attempts.

RECOMMENDATIONS

Recommendations derived from the evaluation results focus on the first and third purposes outlined in the evaluation plan: identification of post-program inservice training needs and suggestions for future replications of the program.

1. The chief focus of inservice training related to SIS should be on continual strengthening of principals' functional knowledge of the system and their ability to apply it to decision making. A systematic attempt should be made to link this training to the concept of accountability. Principals are seen as leaders in the use of SIS information for educational decision making. Some of the program participants will need continuous motivation and assurance if they are to fulfill this aspect of their leadership roles.

2. Participants are also in need of additional help with techniques for communicating evaluative information. Portions of principals' conferences, a seminar offering, or even an additional workshop might be suitable means of meeting this need.

3. In future program replications the essential structure of the program should be kept relatively intact. There seemed to be a proper balance between didactic presentations and learning activities. Unless there is good reason to modify this structure, its success probably warrants continued use.

4. The content of components of the training program should be scrutinized to determine their appropriateness for future target groups. In general, the sessions most highly valued by participants in the original program should be given preference unless the specific needs of the target audience dictate otherwise.

5. Consideration should be given to making future replications more compact by exchanging half-day for full-day sessions. This preference on the part of a number of the original participants may also characterize future target groups.

APPENDIX

Appendix Table 1. Mean Participants' Ratings of the Usefulness of Program Components by Level.

Component	Elementary (N=71)	Secondary (N=55)
Analysis of 1971-72 Reports	4.01	4.09
Interpretation of SIS Reports	3.82	4.10
Waldrip: Accountability	3.88	4.02
Felix: SIS in Program Evaluation	3.87	4.02
Panel: What the Public Wants to Know	3.73	4.08
Smith: Management Information System	3.72	3.96
Smith: Potential of SIS	3.77	3.69
Jacobs: Principles of Using Information	3.45	3.59
Exercise 1 Group Decision Making	3.30	3.56
Goal Setting Simulation	3.19	3.53
Bollenbacher: Interpreting Achievement Data	3.20	3.39
Barbadora: Data Usage and Group Involvement	3.05	3.32
Varland: Use of Surveys	3.08	2.88
Curry: Development of SIS	2.90	3.08
Faust: SIS and Management Model	2.56	3.00

EVALUATION PLAN

Management Training Program: Using Information for Decision Making

August 21-25, 1972

A. Purposes of Evaluation

1. To disclose specific needs for post-program inservice training of administrators by indicating deficiencies in the accomplishment of program objectives.
2. To assess the extent to which principals accept and understand the School Information System (SIS).
3. To suggest program modifications that are likely to improve the quality of the program as it is replicated for other audiences.
4. To provide adequate process evaluation to insure that any concurrent program modifications that are crucial will be made known to the program administrators.

B. Instruments and Techniques

1. Product Instruments
   a. Participants' ratings (post only): Current level of understanding, increase of level of understanding, worthwhileness of program components.
   b. Concept Test (pre and post): Checklists, multiple-choice, true-false.
   c. Test simulation (pre and post): Multiple-choice and rating questions based on selected data for hypothetical school.
2. Process Techniques:
   a. Interaction with evaluators: Evaluators listen and question at coffee breaks.
   b. Suggestion box: Written comments may be submitted anytime.

C. Subgoals and Objectives

1. To provide principals an opportunity to review and apply 1971-72 SIS data to specific task situations.

   a. All principals attending the training program will participate in the application of a task situation to their 1971-72 SIS reports.

   b. On the participants' rating instrument, this activity will rank among the three program components seen as most useful.

2. To assist principals in acquiring a functional knowledge of SIS.

   a. On a checklist of real and fictitious variables on the concept test, the number correctly identified as those in SIS will show some increase from pre to post test. Further, the number correctly identified by individual participants will increase for at least 75% of the respondents.

   b. Given a checklist of questions that one might try to answer with SIS data, participants will be more successful on the post test than on the pre test, in selecting those that can actually be answered. Increase in the mean and improvement for 75% of the participants will be used as criteria.

   c. Participants' ratings of the program components related to functional knowledge of SIS will yield a mean at or above the mid-point of the scale.

3. To assist the principals in the use of SIS data for decision making relating to goal setting and problem identification.

   a. In the test simulation, there will be an increase from pre to post test in the mean number of correct responses to items involving the use of survey data in goal setting.

b. In the test simulation, participants' rating of five equally valued goals on the basis of a comparison between hypothetical school data and city-wide averages will show closer agreement with judges' ratings on the post test than on the pre test.

c. On the concept test, there will be an increase from pre to post test in the mean number of correct responses to items concerned with various needs identification techniques.

d. Participants' ratings of program components related to goal setting and problem identification will yield a mean at or above the mid-point of the scale.

4. To assist principals in the utilization of SIS data in program evaluation.

a. In the test simulation, there will be an increase from pre to post test in the mean number of correct responses to items concerned with evaluating a program of non-gradedness based on hypothetical school data.

b. On the concept test, there will be an increase from pre to post test in the mean number of correct responses to items concerned with the role of program evaluation in local school program development.

c. Participants' ratings of program components concerned with program evaluation will yield a mean at or above the mid-point of the scale.

5. To assist principals in the interpretation and use of the Student, Teacher and Parent Surveys.

a. In the test simulation there will be an increase from pre to post test in the mean number of correct responses to items concerned with the use of survey data in goal setting.

b. In the test simulation, there will be an increase from pre to post test in the mean number of correct responses to items concerned with the use of survey data in evaluating a program of non-gradedness.

c. On the concept test, there will be an increase from pre to post test in the mean number of correct responses to items concerned with the use of survey data.

d. Participants' ratings of program components concerned with the use of survey data will yield a mean at or above the mid-point of the scale.

6. To assist principals in communicating information to staff, students and the public.

a. Participants' ratings of program components concerned with communicating information will yield a mean at or above the mid-point of the scale.

b. At the close of the training program, participants, on the average, will rate their current level of understanding of communication techniques suited to staff, students, parents and other community members as at least adequate for present purposes.

c. Participants' ratings of their increase of understanding of communication techniques will yield a mean equal to or greater than the minimum predicted mean for a measureable increase. The prediction formula will be derived from the regression of the ratings of increased understanding, on pre-post content test differences in objectives 2 through 5.

7. To provide knowledge about the nature and qualities of decisions and information.

   a. Participants' ratings of program components related to decistions and information will yield a mean at or above the mid-point of the scale.

   b. At the close of the training program, participants, on the average, will rate their current level of understanding of the nature and qualities of decisions and information as at least adequate for present purposes.

   c. Participants' ratings of their increase of understanding of the nature and qualities of decisions and information will yield a mean equal to or greater than the minimum predicted mean for a measurable increase.

8. To show the relation between SIS reports and accountability.

   a. Participants' ratings of program components concerned with accountability will yield a mean at or above the mid-point of the scale.

   b. At the close of the training program, participants, on the average, will rate their current level of understanding of accountability as at least adequate for present purposes.

   c. Participants' ratings of their increase of understanding of accountability will yield a mean equal to or greater than the minimum predicted mean for a measurable increase.

D. Schema

INSTRUMENTS AND TECHNIQUES

Objectives	Ratings 1a	Concept Test 1b	Test Simulation 1c	Evaluation 2a	Suggestion Box 2b
1a				✓	✓
1b	✓				
2a		✓			
2b		✓			
2c	✓				
3a			✓		
3b			✓		
3c		✓			
3d	✓				
4a			✓		
4b		✓			
4c	✓				
5a			✓		
5b			✓		
5c		✓			
5d	✓				
6a	✓				
6b	✓				
6c	✓				
7a	✓				
7b	✓				
7c	✓				
8a	✓				
8b	✓				
8c	✓				

Evaluation Instruments

USING INFORMATION FOR DECISION MAKING

Identification _____ Date _____

Part A

Test Simulation

Accompanying this instrument are six sheets of data for Gamma Educational Park. Three of these (green sheets) are for the 1970-71 school year, and three (pink sheets) are for the 1971-72 school year. These six sheets provide the data for this test simulation.

1. Using only the 1970-71 data (green sheets), rank the five goals listed below in terms of priority. Designate the top-priority goal as 1, etc. Assume that all five goals are, of themselves, equally valued.

   _____ a. Improved school-community relations

   _____ b. Improved staff morale

   _____ c. Improved student attitudes

   _____ d. Improved reading achievement, primary grades

   _____ e. Improved reading achievement, junior high

2. Using only the 1970-71 data (green sheets), answer the following items by marking an X through T if the statement is true, and through F if the statement is false.

   T X a. In general, Gamma parents have better attitudes toward school than the students have.

   X F b. For the most part, Gamma students seem to be achieving below national test norms.

   X F c. Attitudes as measured on the Parent Survey seem consistent with other indicators of how Gamma parents feel about school.

   X F d. If pupil/teacher ratio is an indication of the general working conditions at Gamma, the teachers seem to have an accurate perception of this factor.

   T X e. Of the three groups surveyed, Gamma teachers seem to have the most favorable attitudes.

3. At the insistence of several community groups, a program of nongraded instruction was begun at Gamma in 1971-72. This program was initiated at the primary level with emphasis on reading. Using both the 1970-71 and the 1971-72 data, answer the following items about the effectiveness of this program. Mark an X through T if the statement is true and through F if the statement is false.

T X a. The data provided offer no way of judging how primary children felt about the program.

X F b. There is some evidence that the program had a positive effect on reading achievement.

T X c. Parents seem to have been less involved in school affairs under the nongraded system.

T X d. For the primary students themselves, the program seems to have had no negative effects.

X F e. Gamma's principal should emphasize the successful aspects of the program to his community.

ESEA TITLE III
CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

(976) GAMMA EDUCATIONAL PARK — VARIABLE PRINTOUT
1971-72 SCHOOL YEAR

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL SCHOOL UNITS	CRITICAL AREA
	ABSENCE AND ATTENDANCE				
3.00	GR.1 AVG DAILY ABSENCE	(-)	3.41%	8.39%	5.00% TO 11.78%
3.00	GR.2 AVG DAILY ABSENCE	(-)	2.96%	7.62%	3.99% TO 11.25%
3.00	GR.3 AVG DAILY ABSENCE	(-)	2.84%	7.17%	3.62% TO 10.72%
7.00	GR.4 AVG DAILY ABSENCE	(-)	6.73%	7.65%	3.85% TO 11.45%
7.00	GR.5 AVG DAILY ABSENCE	(-)	6.95%	7.34%	3.15% TO 11.53%
7.00	GR.6 AVG DAILY ABSENCE	(-)	6.02%	7.36%	2.58% TO 12.14%
24.00	GR.7 AVG DAILY ABSENCE	(-)	13.12%	13.76%	7.85% TO 19.67%
28.00	GR.8 AVG DAILY ABSENCE	(-)	14.36%	15.16%	9.18% TO 21.14%
21.00	GR.9 AVG DAILY ABSENCE	(-)	15.45%	15.93%	6.58% TO 25.28%
35.00	GR.10 AVG DAILY ABSENCE	(-)	16.72%	17.20%	8.06% TO 26.34%
37.00	GR.11 AVG DAILY ABSENCE	(-)	14.36%	15.51%	8.91% TO 22.11%
25.00	GR.12 AVG DAILY ABSENCE	(-)	8.98%	9.64%	4.84% TO 14.44%
	ACADEMIC ACHIEVEMENT				
	GR.3 READING SUBTEST		(GRADE EQUIVALENT)		
	10% OF STUDENTS AT OR BELOW	(+)	1.70	1.80	1.00 TO 2.60
	25% OF STUDENTS AT OR BELOW	(+)	2.30	2.30	1.30 TO 3.30
	50% OF STUDENTS AT OR BELOW	(+)	2.80	2.80	1.60 TO 4.00
	75% OF STUDENTS AT OR BELOW	(+)	3.40	3.50	2.00 TO 5.00
	90% OF STUDENTS AT OR BELOW	(+)	4.40	4.40	2.40 TO 6.40
	GR.3 ARITHMETIC COMPUTATION				
	10% OF STUDENTS AT OR BELOW	(+)	1.70	2.10	1.20 TO 3.00
	25% OF STUDENTS AT OR BELOW	(+)	2.30	2.60	1.50 TO 3.70
	50% OF STUDENTS AT OR BELOW	(+)	2.60	3.00	1.70 TO 4.30
	75% OF STUDENTS AT OR BELOW	(+)	3.50	4.00	2.40 TO 5.60
	90% OF STUDENTS AT OR BELOW	(+)	4.00	4.50	2.60 TO 6.40
	GR.6 READING SUBTEST				
	10% OF STUDENTS AT OR BELOW	(+)	3.00	3.10	1.60 TO 4.60
	25% OF STUDENTS AT OR BELOW	(+)	4.10	4.10	2.10 TO 6.10
	50% OF STUDENTS AT OR BELOW	(+)	5.00	5.10	2.80 TO 7.40
	75% OF STUDENTS AT OR BELOW	(+)	6.40	6.50	3.60 TO 9.40
	90% OF STUDENTS AT OR BELOW	(+)	8.00	8.20	4.60 TO 11.80
	GR.6 ARITHMETIC COMPUTATION				
	10% OF STUDENTS AT OR BELOW	(+)	4.10	4.30	2.50 TO 6.10
	25% OF STUDENTS AT OR BELOW	(+)	4.80	4.90	2.70 TO 7.10
	50% OF STUDENTS AT OR BELOW	(+)	5.50	5.70	3.20 TO 8.20
	75% OF STUDENTS AT OR BELOW	(+)	6.70	6.80	3.70 TO 9.90
	90% OF STUDENTS AT OR BELOW	(+)	8.40	8.50	4.80 TO 12.20

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL SCHOOL UNITS	CRITICAL AREA
	GR.8 READING SUBTEST		(GRADE EQUIVALENT)		
	10% OF STUDENTS AT OR BELOW	(+)	3.70	3.60	0.70 TO 6.50
	25% OF STUDENTS AT OR BELOW	(+)	4.30	4.40	1.20 TO 7.60
	50% OF STUDENTS AT OR BELOW	(+)	6.00	6.10	2.90 TO 9.30
	75% OF STUDENTS AT OR BELOW	(+)	8.70	8.70	5.30 TO 12.10
	90% OF STUDENTS AT OR BELOW	(+)	9.60	9.60	6.20 TO 13.00
	GR.8 MATH COMPUTATION				
	10% OF STUDENTS AT OR BELOW	(+)	4.00	4.00	1.10 TO 6.90
	25% OF STUDENTS AT OR BELOW	(+)	4.70	4.80	1.70 TO 7.90
	50% OF STUDENTS AT OR BELOW	(+)	6.30	6.30	3.10 TO 9.50
	75% OF STUDENTS AT OR BELOW	(+)	8.10	8.10	4.60 TO 11.60
	90% OF STUDENTS AT OR BELOW	(+)	9.70	9.70	6.30 TO 13.10
	ACADEMIC APTITUDE				
	KUHLMANN-ANDERSON - GR.3		(I.Q. LEVEL)		
	10% OF STUDENTS AT OR BELOW	(+)	79.84	78.30	45.12 TO 111.48
	25% OF STUDENTS AT OR BELOW	(+)	88.00	86.06	49.78 TO 122.34
	50% OF STUDENTS AT OR BELOW	(+)	97.67	95.87	55.44 TO 136.30
	75% OF STUDENTS AT OR BELOW	(+)	108.92	107.44	62.87 TO 152.01
	90% OF STUDENTS AT OR BELOW	(+)	123.23	118.17	69.40 TO 166.94
	LORGE-THORNDIKE - GR.6				
	10% OF STUDENTS AT OR BELOW	(+)	77.13	76.43	42.66 TO 110.20
	25% OF STUDENTS AT OR BELOW	(+)	86.03	84.73	47.96 TO 121.50
	50% OF STUDENTS AT OR BELOW	(+)	96.26	94.30	53.35 TO 135.25
	75% OF STUDENTS AT OR BELOW	(+)	108.47	105.74	60.19 TO 151.29
	90% OF STUDENTS AT OR BELOW	(+)	120.39	117.73	67.19 TO 168.27
	SCHOOL & COLLEGE APTITUDE TEST - GR.9 - TOTAL TEST		(PERCENTILES)		
	10% OF STUDENTS AT OR BELOW	(+)	7.00	3.00	1.00 TO 22.00
	25% OF STUDENTS AT OR BELOW	(+)	12.00	7.00	2.00 TO 33.00
	50% OF STUDENTS AT OR BELOW	(+)	38.00	21.00	3.00 TO 54.00
	75% OF STUDENTS AT OR BELOW	(+)	64.00	48.00	7.00 TO 89.00
	90% OF STUDENTS AT OR BELOW	(+)	88.00	80.00	37.00 TO 99.00
	PTA MEMBERSHIP	(+)	26.41%	35.78%	8.19% TO 63.37%
	VOTING 'FOR' LEVY	(+)	29.16%	29.58%	1.96% TO 57.20%
	ATTITUDE (PARENT SURVEY)				
	PARENTS RESPONDING	(+)	59.63%	53.40%	31.98% TO 74.82%
	SCHOOL ATMOSPHERE FACTOR	(+)	62.19%	59.13%	37.71% TO 80.55%
	SCHOOL PROGRAM QUALITY FACTOR	(+)	76.43%	54.89%	33.47% TO 76.31%
	SCHOOL PUPIL RELATIONS FACTOR	(+)	66.51%	62.48%	41.06% TO 83.90%
	EDUCATIONAL ISSUES FACTOR	(+)	58.33%	56.93%	35.51% TO 78.35%
	PARENT PARTICIPATION FACTOR	(+)	54.20%	51.40%	29.98% TO 72.82%

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL SCHOOL UNITS	CRITICAL AREA
	STUDENT ATTITUDE (GR.6)				
	ACADEMIC CONFIDENCE FACTOR	(+)	77.84%	59.56%	32.48% TO 86.64%
	ATTITUDE TOWARD SCHOOL FACTOR	(+)	83.14%	57.77%	32.87% TO 82.67%
	STUDENT ATTITUDE (GR.9)				
	ACADEMIC CONFIDENCE FACTOR	(+)	69.13%	51.15%	31.29% TO 71.01%
	ATTITUDE TOWARD SCHOOL FACTOR	(+)	63.14%	44.42%	27.47% TO 61.37%
	STUDENT ATTITUDE (GR.12)				
	ACADEMIC CONFIDENCE FACTOR	(+)	84.73%	62.26%	36.92% TO 87.60%
	ATTITUDE TOWARD SCHOOL FACTOR	(+)	75.39%	52.30%	32.59% TO 72.01%
	ATTITUDE (TEACHER SURVEY)				
	TEACHERS RESPONDING	(+)	81.95%	81.32%	54.94% TO 99.50%
	STAFF MORALE FACTOR	(+)	4.73	4.61	3.05 TO 6.17
	SPECIAL EDUCATION NEEDS FACTOR	(+)	2.96	2.83	1.67 TO 3.99
	PUPIL CHARACTERISTICS FACTOR	(+)	4.42	4.42	2.90 TO 5.94
	WORKING CONDITIONS FACTOR	(+)	3.19	4.39	2.80 TO 5.98
	PHYSICAL RESOURCES FACTOR	(+)	4.73	4.42	2.94 TO 5.90
	COMMUNITY & PARENT CONTACTS FACTOR	(+)	4.83	4.27	2.79 TO 5.75
	OPENNESS TO INNOVATION FACTOR	(+)	4.76	4.41	2.86 TO 5.96
	PUPIL/TEACHER RATIO				
	OVERALL SCHOOL	( )	36.00/ONE	27.00/ONE	22.48 TO 31.52

ESEA TITLE III
CINCINNATI PUBLIC SCHOOL INFORMATION SYSTEM
DIVISION OF PROGRAM RESEARCH & DESIGN

(976) GAMMA EDUCATIONAL PARK

VARIABLE PRINTOUT
1970-71 SCHOOL YEAR

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL SCHOOL UNITS	CRITICAL AREA
	ABSENCE AND ATTENDANCE				
7.00	GR.1 AVG DAILY ABSENCE	(-)	6.24%	8.39%	5.00% TO 11.78%
6.00	GR.2 AVG DAILY ABSENCE	(-)	5.86%	7.62%	3.99% TO 11.25%
7.00	GR.3 AVG DAILY ABSENCE	(-)	6.23%	7.17%	3.62% TO 10.72%
7.00	GR.4 AVG DAILY ABSENCE	(-)	6.84%	7.65%	3.85% TO 11.45%
7.00	GR.5 AVG DAILY ABSENCE	(-)	6.53%	7.34%	3.15% TO 11.53%
7.00	GR.6 AVG DAILY ABSENCE	(-)	6.62%	7.36%	2.58% TO 12.14%
23.00	GR.7 AVG DAILY ABSENCE	(-)	13.01%	13.76%	7.85% TO 19.67%
28.00	GR.8 AVG DAILY ABSENCE	(-)	14.86%	15.16%	9.18% TO 21.14%
21.00	GR.9 AVG DAILY ABSENCE	(-)	15.25%	15.93%	6.58% TO 25.28%
43.00	GR.10 AVG DAILY ABSENCE	(-)	16.80%	17.20%	8.06% TO 26.34%
38.00	GR.11 AVG DAILY ABSENCE	(-)	14.95%	15.51%	8.91% TO 22.11%
25.00	GR.12 AVG DAILY ABSENCE	(-)	8.43%	9.64%	4.84% TO 14.44%
	ACADEMIC ACHIEVEMENT		(GRADE EQUIVALENT)		
	GR.3 READING SUBTEST				
	10% OF STUDENTS AT OR BELOW	(+)	1.60	1.80	1.00 TO 2.60
	25% OF STUDENTS AT OR BELOW	(+)	2.10	2.30	1.30 TO 3.30
	50% OF STUDENTS AT OR BELOW	(+)	2.60	2.80	1.60 TO 4.00
	75% OF STUDENTS AT OR BELOW	(+)	3.30	3.50	2.00 TO 5.00
	90% OF STUDENTS AT OR BELOW	(+)	4.10	4.40	2.40 TO 6.40
	GR.3 ARITHMETIC COMPUTATION				
	10% OF STUDENTS AT OR BELOW	(+)	2.10	2.10	1.20 TO 3.00
	25% OF STUDENTS AT OR BELOW	(+)	2.60	2.60	1.50 TO 3.70
	50% OF STUDENTS AT OR BELOW	(+)	3.00	3.00	1.70 TO 4.30
	75% OF STUDENTS AT OR BELOW	(+)	4.10	4.00	2.40 TO 5.60
	90% OF STUDENTS AT OR BELOW	(+)	4.60	4.50	2.60 TO 6.40
	GR.6 READING SUBTEST				
	10% OF STUDENTS AT OR BELOW	(+)	3.00	3.10	1.60 TO 4.60
	25% OF STUDENTS AT OR BELOW	(+)	4.00	4.10	2.10 TO 6.10
	50% OF STUDENTS AT OR BELOW	(+)	5.10	5.10	2.80 TO 7.40
	75% OF STUDENTS AT OR BELOW	(+)	6.40	6.50	3.60 TO 9.40
	90% OF STUDENTS AT OR BELOW	(+)	8.10	8.20	4.60 TO 11.80
	GR.6 ARITHMETIC COMPUTATION				
	10% OF STUDENTS AT OR BELOW	(+)	4.10	4.30	2.50 TO 6.10
	25% OF STUDENTS AT OR BELOW	(+)	4.80	4.90	2.70 TO 7.10
	50% OF STUDENTS AT OR BELOW	(+)	5.50	5.70	3.20 TO 8.20
	75% OF STUDENTS AT OR BELOW	(+)	6.70	6.80	3.70 TO 9.90
	90% OF STUDENTS AT OR BELOW	(+)	8.40	8.50	4.80 TO 12.20

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL SCHOOL UNITS	CRITICAL AREA
	GR.8 READING SUBTEST		(GRADE EQUIVALENT)		
	10% OF STUDENTS AT OR BELOW	(+)	3.70	3.60	0.70 TO 6.50
	25% OF STUDENTS AT OR BELOW	(+)	4.40	4.40	1.20 TO 7.60
	50% OF STUDENTS AT OR BELOW	(+)	6.20	6.10	2.90 TO 9.30
	75% OF STUDENTS AT OR BELOW	(+)	8.90	8.70	5.30 TO 12.10
	90% OF STUDENTS AT OR BELOW	(+)	9.90	9.60	6.20 TO 13.00
	GR.8 MATH COMPUTATION				
	10% OF STUDENTS AT OR BELOW	(+)	4.00	4.00	1.10 TO 6.90
	25% OF STUDENTS AT OR BELOW	(+)	4.80	4.80	1.70 TO 7.90
	50% OF STUDENTS AT OR BELOW	(+)	6.20	6.30	3.10 TO 9.50
	75% OF STUDENTS AT OR BELOW	(+)	8.00	8.10	4.60 TO 11.60
	90% OF STUDENTS AT OR BELOW	(+)	9.60	9.70	6.30 TO 13.10
	ACADEMIC APTITUDE				
	KUHLMANN-ANDERSON - GR.3		(I.Q. LEVEL)		
	10% OF STUDENTS AT OR BELOW	(+)	80.13	78.30	45.12 TO 111.48
	25% OF STUDENTS AT OR BELOW	(+)	88.26	86.06	49.78 TO 122.34
	50% OF STUDENTS AT OR BELOW	(+)	98.10	95.87	55.44 TO 136.30
	75% OF STUDENTS AT OR BELOW	(+)	110.21	107.44	62.87 TO 152.01
	90% OF STUDENTS AT OR BELOW	(+)	124.95	118.17	69.40 TO 166.94
	LORGE-THORNDIKE - GR.6				
	10% OF STUDENTS AT OR BELOW	(+)	76.97	76.43	42.66 TO 110.20
	25% OF STUDENTS AT OR BELOW	(+)	85.24	84.73	47.96 TO 121.50
	50% OF STUDENTS AT OR BELOW	(+)	96.01	94.30	53.35 TO 135.25
	75% OF STUDENTS AT OR BELOW	(+)	107.21	105.74	60.19 TO 151.29
	90% OF STUDENTS AT OR BELOW	(+)	119.95	117.73	67.19 TO 168.27
	SCHOOL & COLLEGE APTITUDE TEST - GR.9 - TOTAL TEST		(PERCENTILES)		
	10% OF STUDENTS AT OR BELOW	(+)	6.00	3.00	1.00 TO 22.00
	25% OF STUDENTS AT OR BELOW	(+)	12.00	7.00	2.00 TO 33.00
	50% OF STUDENTS AT OR BELOW	(+)	37.00	21.00	3.00 TO 54.00
	75% OF STUDENTS AT OR BELOW	(+)	62.00	48.00	7.00 TO 89.00
	90% OF STUDENTS AT OR BELOW	(+)	88.00	80.00	37.00 TO 99.00
	PTA MEMBERSHIP	(+)	7.67%	35.78%	8.19% TO 63.37%
	VOTING 'FOR' LEVY	(+)	10.23%	29.58%	1.96% TO 57.20%
	ATTITUDE (PARENT SURVEY)				
	PARENTS RESPONDING	(+)	30.84%	53.40%	31.98% TO 74.82%
	SCHOOL ATMOSPHERE FACTOR	(+)	31.62%	59.13%	37.71% TO 80.55%
	SCHOOL PROGRAM QUALITY FACTOR	(+)	29.83%	54.89%	35.47% TO 76.31%
	SCHOOL PUPIL REALTIONS FACTOR	(+)	40.92%	62.48%	41.06% TO 83.90%
	EDUCATIONAL ISSUES FACTOR	(+)	30.13%	56.93%	35.51% TO 78.35%
	PARENT PARTICIPATION FACTOR	(+)	26.84%	51.40%	29.98% TO 72.82%

YOUR SCHOOL UNIT NUMBER VALUE	VARIABLE	DIRECTION OF VARIABLE	YOUR SCHOOL UNIT VALUE	ALL SCHOOL UNITS	CRITICAL AREA
	STUDENT ATTITUDE (GR.6)				
	ACADEMIC CONFIDENCE FACTOR	(+)	76.27%	59.56%	32.48% TO 86.64%
	ATTITUDE TOWARD SCHOOL FACTOR	(+)	82.39%	57.77%	32.87% TO 82.67%
	STUDENT ATTITUDE (GR.9)				
	ACADEMIC CONFIDENCE FACTOR	(+)	67.43%	51.15%	31.29% TO 71.01%
	ATTITUDE TOWARD SCHOOL FACTOR	(+)	60.96%	44.42%	27.47% TO 61.37%
	STUDENT ATTITUDE (GR.12)				
	ACADEMIC CONFIDENCE FACTOR	(+)	82.64%	62.26%	36.92% TO 87.60%
	ATTITUDE TOWARD SCHOOL FACTOR	(+)	73.72%	52.30%	32.59% TO 72.01%
	ATTITUDE (TEACHER SURVEY)				
	TEACHERS RESPONDING	(+)	74.82%	81.32%	54.94% TO 99.50%
	STAFF MORALE FACTOR	(+)	4.10	4.61	3.05 TO 6.17
	SPECIAL EDUCATION NEEDS FACTOR	(+)	2.76	2.83	1.67 TO 3.99
	PUPIL CHARACTERISTICS FACTOR	(+)	4.33	4.42	2.90 TO 5.94
	WORKING CONDITIONS FACTOR	(+)	2.61	4.39	2.80 TO 5.98
	PHYSICAL RESOURCES FACTOR	(+)	3.94	4.42	2.94 TO 5.90
	COMMUNITY & PARENT CONTACTS FACTOR	(+)	3.81	4.27	2.79 TO 5.75
	OPENNESS TO INNOVATION FACTOR	(+)	4.06	4.41	2.86 TO 5.96
	PUPIL/TEACHER RATIO				
	OVERALL SCHOOL	( )	36.00/ONE	27.00/ONE	22.48 TO 31.52

Identification _____ Date _____

Part B

Content Test

Answer the questions on this instrument on the basis of your knowledge of the School Information System, needs identification techniques, and program evaluation techniques.

1. Check all the items in the list below that represent variables included in the School Information System.

___ Percentage of Community Residents with College Degrees

✓ Number of Psychological Referrals

___ Number of Students Receiving Public Dental Care

✓ Number of Transfers-Out

✓ Number of Persons per Total Acre--70 Census

___ Number of Students Eligible for Special Education

✓ Number of Students Receiving Subsidized Lunches

✓ Percentage of Women on Staff

✓ Percentage of Felony Arrests

✓ Age of School Building

2. Check all the questions in the list below that can be answer with data from the School Information System.

___ What's the average attendance at PTA meetings in my school?

___ How do the most intelligent students in my school compare in Math achievement with those in other schools?

✓ In terms of certification, how well qualified are my teachers, compared to those of previous years?

___ What is the ratio of black to white parents in my community?

✓ How many students in my school live in foster homes?

✓ How do teachers in my school feel about educational innovation?

3. Answer the following items by marking an X through T if the statement is true and through F if the statement is false.

X	F	a.	Even when the total school community has been involved in goal development, support for the goals will be increased by data that substantiate related needs.
X	F	b.	Goal statements should specify the target group, the thing to be done, and the amount of change desired.
T	X	c.	Needs assessment should usually be concerned with problems, not with successes.
T	X	d.	One important reason for involving the community in goal setting is to relieve the principal of responsibility for making decisions.
T	X	e.	In working with the community to evaluate the school program, the principal should present complete information to all interested groups.
X	F	f.	The trust level between the school and its critics is important in deciding how to use evaluative information.
X	F	g.	SIS exceptions reports may identify a school's strengths and weaknesses, as well as alibis for poor performance.
T	X	h.	Program evaluation should concern itself with the goals of the program and not with unexpected outcomes.
T	X	i.	Because surveys give subjective information, their results usually should not be included in program evaluation.
X	F	j.	Surveys often provide information about attitudes that could not be obtained in any other way.
X	F	k.	One important use of surveys is to detect inconsistencies of viewpoints across groups.
T	X	l.	For the sake of comparison across years, SIS surveys are kept identical from one year to the next.

Final Day of Program

_____
Identification

Part C

Participant's Ratings

Please respond frankly to the following items by putting a check (✓) in the column that reflects your rating.

1. Evaluate each of the following presentations and activities on the basis of the usefulness of what you learned.

	Not Useful	A Little Useful	Fairly Useful	Very Useful	Indispensable
1st day					
Curry: Development of SIS	___	___	___	___	___
Waldrip: Accountability	___	___	___	___	___
Exercise in Group Decision Making	___	___	___	___	___
2nd day					
Barbadora: Data Usage & Group Involvement	___	___	___	___	___
Jacobs: Principles of Using Information	___	___	___	___	___
Interpretation of SIS Reports	___	___	___	___	___
3rd day					
Goal Setting Simulation	___	___	___	___	___
Felix: SIS in Program Evaluation	___	___	___	___	___
Faust: SIS and Management Model	___	___	___	___	___
Bollenbacher: Interpreting Achievement Data	___	___	___	___	___
4th day					
Smith: Management Information System	___	___	___	___	___
Panel: What Public Wants to Know	___	___	___	___	___
Smith: Potential of SIS	___	___	___	___	___
5th day					
Varland: Use of Surveys	___	___	___	___	___
Analysis of 1971-72 Reports	___	___	___	___	___

2. For each of the following areas, evaluate how much your knowledge has increased during this workshop and how adequate your current understanding is. Give your judgment of knowledge increase as a rating from 1 (no increase) to 7 (very large increase). Appraise your current understanding by checking (✓) one of the three columns provided.

		KNOWLEDGE INCREASE (1=no increase, to 7=very large)	CURRENT UNDERSTANDING		
			Probably Inadequate	Adequate for Present Purposes	Thorough and Completely Adequate
a.	Your functional knowledge of SIS	____	____	____	____
b.	Your ability to use SIS in goal setting and problem identification	____	____	____	____
c.	Your ability to use SIS in program evaluation	____	____	____	____
d.	Your ability to interpret and use survey results	____	____	____	____
e.	Your understanding of techniques for communicating information	____	____	____	____
f.	Your knowledge of the nature and qualities of decisions and information	____	____	____	____
g.	Your understanding of accountability	____	____	____	____

APPENDIX C

Evaluation Report for SIS Training Sessions

November, 1972

SUMMATIVE EVALUATION REPORT

Using Information for Decision Making

SIS Management Training Program

November, 1972

CINCINNATI PUBLIC SCHOOLS
Division of Program Research and Design

SUMMATIVE EVALUATION REPORT

Using Information for Decision Making

SIS Management Training Program
November, 1972

INTRODUCTION

Purpose

Aim of Report. This report presents the summative evaluation of the management training program conducted for Education Center administrators and supervisors of the Cincinnati Public Schools by the staff of the School Information System (SIS). The information presented here is intended to serve two fundamental purposes. First, it should provide participants in the training program and other interested personnel with a concise yet thorough evaluation of the training. Secondly, the information in this report supplements that of the more detailed evaluation of the comparable program given in August for principals and assistant principals. Together, these two reports should furnish the staff of SIS with a comprehensive assessment of how well the training has accomplished its objectives.

Purpose of Evaluation. The detailed evaluation plan devised for the August training program specified four purposes for conducting the evaluation. These were concerned with disclosing needs for post-program inservice training, assessing acceptance and understanding of SIS, suggesting program modifications for future replications, and providing process evaluation.

In adapting the original program to the needs of Education Center personnel, the program coordinator and evaluator decided that only the first two of these original purposes were appropriate for evaluating the new program. Thus, the two purposes that this evaluation attempted to serve

were:

1. To disclose specific needs for post-program inservice training of administrators and supervisors.

2. To assess the extent to which principals accept and understand the School Information System.

Plan of Report. This report is organized into five divisions: Introduction, Cognitive Evaluation, Affective Evaluation, Conclusions, and Recommendation. After this introduction has presented the rationales and the organization of the report, each of the next two sections will focus on one of the purposes toward which evaluation was addressed. The second division of the report will attempt to identify inservice training needs that reveal themselves through responses to the two cognitive instruments administered at the beginning and end of this two-day program. These were the Content Test and the Test Simulation. (See August report).

In the third division of the report the results of an attitude scale administered at the conclusion of the program will be discussed. These results serve primarily the second purpose of evaluation specified above.

Program Goals

A threefold program goal was set for this workshop:

This program seeks to provide central office staff with a greater awareness of: (a) the School Information System (SIS), (b) how data from SIS can be used, and (c) the knowledge and attitudes necessary to use the system effectively.

This goal was further subdivided into eight subgoals:

1. To demonstrate the importance of using information for decision making.

2. To provide knowledge about the nature and qualities of decisions and information.

3. To describe the history and function of SIS.

4. To assist central office staff in acquiring a functional knowledge of SIS reports.

5. To assist the staff in utilizing SIS for decision making related to goal setting and problem identification.

6. To show the relationship between SIS reports and accountability.
7. To assist central office staff in evaluating the needs of local schools.
8. To evaluate the training program.

COGNITIVE EVALUATION

Test Simulation

Goal Setting. The first purpose for evaluating the Education Center workshop was to disclose future inservice training needs. To accomplish this purpose, the Test Simulation contained true-false items related to two major emphases of the program: goal setting and program evaluation.

Five items based on hypothetical data were concerned with matters of establishing educational goals. The percentages of respondents answering each of the questions correctly on the pre-and post-tests are shown in Table 1.

Table 1. Percentages of Correct Response to Goal Setting Items on Test Simulation, by Pre-Post Tests.

Item	Pre Test	Post Test
In general, Gamma parents have better attitudes toward school than the students have.	81%	75%
For the most part, Gamma students seem to be achieving below national test norms.	45	41
Attitudes as measured on the Parent Survey seem consistent with other indicators of how Gamma parents feel about school.	82	55
If pupil/teacher ratio is an indication of the general working conditions at Gamma, the teachers seem to have an accurate perception of this factor.	60	67
Of the three groups surveyed, Gamma teachers seem to have the most favorable attitudes.	73	64

Interestingly, the percentages of correct responses decreased on four of the five items. In interpreting this fact, however, it is important to note that an inadvertent error in reproducing the instrument made it necessary to have two separate keys for the post-test. As a result, the difficulty of some of the items may have been greater on the post- than on the pre-test.

Program Evaluation. This same problem of keying the responses to the Test Simulation existed for the five items concerning program evaluation. The percentages of correct response to these items on pre- and post-tests are shown in Table 2.

Table 2. Percentages of Correct Response to Program Evaluation Items in Test Simulation, by Pre-Post Test.

Item	Pre Test	Post Test
The data provided offer no way of judging how primary children felt about the program.	19%	31%
There is some evidence that the program had a positive effect on reading achievement.	49	53
Parents seem to have been less involved in school affairs under the nongraded system.	49	55
For the primary students themselves, the program seems to have had no negative effects.	23	39
Gamma's principal should emphasize the successful aspects of the program to his community.	56	88

In contrast to the goal setting items, all five of the program evaluation items showed larger percentages of correct answers on the post-test. The difficulty of these items may have been affected less by the error in reproducing the instrument. Or there might actually have been a greater increase in participants' understanding related to this cognitive area.

Content Test

Functional Knowledge of SIS. The Content Test, also administered before and after the training program, was not dependent on hypothetical data. Thus, the difficulty level was identical for both administrations of the test. The first page of items on the Content Test was designed to measure participants' knowledge of the School Information System (SIS). It included a list of ten variables, seven real, and three fictitious. Without knowing the correct number, respondents were asked to identify those actually contained in SIS. Each item in the list was scored as correctly or incorrectly designated.

On this portion of the Content Test, participants answered an average of 4.9 items correctly on the pre-test and an average of 7.3 on the post-test. This increase in the mean number of correct responses suggests that participants' knowledge of the system did increase through the two-day training program. Nevertheless, their post-test responses were less correct than those of the participants in the August program, who averaged over eight items correct.

A second section of the Content Test listed six question, three of which could actually be answered with SIS data. Again without knowing how many, participants were asked to select those questions that could actually be answered.

For this part of the test, correct responses of participants averaged 2.6 of the six items on the pre-test, and 3.1 on the post test. Again

there was an increase, this time comparing favorably with the results of the August workshop.

Goal Setting. Of twelve true-false items on the Content Test, four were concerned with understanding the principles of goal setting. Again, these items were not concerned with hypothectical data, so that pre-post tests results may be compared directly. Percentages of correct responses to these items are reported in Table 3.

Table 3. Percentages of Correct Response to Goal Setting Items on Content Test, by Pre-Post Test.

Item	Pre Test	Post Test
Even when the total school community has been involved in goal development, support for the goals will be increased by data that substantiate related needs.	100%	93%
Goal statements should specify the target group, the thing to be done, and the amount of change desired.	79	89
Needs assessment should usually be concerned with problems, not with successes.	49	53
One important reason for involving the community in goal setting is to relieve the principal of responsibility for making decisions.	90	96

Three of the four items showed increases from beginning to end of program, suggesting that participants' understanding of this area did, in fact, improve.

Program Evaluation. An additional four items from this section of the Content Test were related to program evaluation. The percentages of correct responses for these items are shown in Table 4.

Table 4. Percentages of Correct Response to Program Evaluation Items on Content Test, by Pre-Post Test.

Items	Pre Test	Post Test
In working with the community to evaluate the school program, the principal should present complete information to all interested groups.	18%	49%
The trust level between the school and its critics is important in deciding how to use evaluative information.	74	93
SIS exceptions reports may identify a school's strengths and weaknesses, as well as alibis for poor performance.	44	73
Program evaluation should concern itself with the goals of the program and not with unexpected outcomes.	56	73

All four items showed improvement from pre- to post-test. In general, there was a substantial increase in the percentage of respondents giving correct answers. This result confirms the evidence from the Test Simulation that participants did gain in their knowledge of this cognitive area.

Surveys. The last four items on the Content Test were related to the use of surveys. Although survey use was not addressed as a major area for this program as it was in August, survey data was included in the information used by participants in practice exercises. The correct response percentage for these four items are shown in Table 5.

Table 5. Percentages of Correct Response to Survey Items on Content Test, by Pre-Post Test.

Items	Pre Test	Post Test
Because surveys give subjective information, their results usually should not be included in program evaluation.	67%	95%
Surveys often provide information about attitudes that could not be obtained in any other way.	56	87
One important use of surveys is to detect inconsistencies of viewpoints across groups.	54	89
For the sake of comparison across years, SIS surveys are kept identical from one year to the next.	46	49

Again, all four items showed improvement from pre- to post- test, with substantial gain on three of the four. This result suggests that the practical application of survey data may have been adequate to increase understanding in this area.

AFFECTIVE EVALUATION

Opinion Inventory

Attitudes toward SIS. An Opinion Inventory (attitude scale) was administered at the close of the workshop to measure participants' feelings about SIS and the training program. On each of twenty items, respondents reflected their extent of agreement or disagreement. Six of these items were specifically concerned with feelings about the School Information System.

Items scores were computed by assigning a value of five to the most favorable response, a value of one to the least favorable, and values of four,

three, and two to the intermediate responses.

For example, if the statement expressed a positive attitude, a response of strongly agree was given a five-point value, agree four points, undecided three points, disagree two points, and strongly disagree one point. The scale was reversed for statements expressing negative attitudes.

The scores for the six items dealing with attitudes toward SIS are shown in Table 6.

Table 6. Item Scores on Opinion Inventory Items Related to Attitudes toward SIS.

Item	Item Mean
The School Information System contains useful information for school administrators.	4.6
Spending taxpayers' money to accumulate a bank of data like SIS is a waste.	4.4
SIS printouts do not clearly describe a school.	3.3
I don't think SIS data will help me in making administrative decisions.	4.0
I would like to learn more about the School Information System.	4.2
I am eager to begin applying SIS data to my work.	3.9

The six item scores averaged 4.1, suggesting positive feelings toward the School Information System. There should be little need for concentrating future efforts on improving the attitudes of Education Center personnel towards SIS.

Using Evaluative Data. Another six items on the Opinion Inventory concerned attitudes toward the use of evaluative information. The scores

for these six items are reported in Table 7.

Table 7. Item Scores on Opinion Inventory Items Related to Use of Evaluative Data.

Item	Item Mean
Having no data at all is better than having data that might be misinterpreted.	3.5
I find the concept of accountability threatening.	4.3
I don't know enough about statistics to use the information contained in SIS.	3.6
The goals of education are too intangible to be measured by hard data.	4.0
I don't believe there is a need to base educational decisions on factual information.	4.5
In general, educational evaluation seems worthless to me.	4.6

Again the item mean indicates positive feelings on the part of the participants. Thus, there is probably little need for additional concern with feelings in this area.

Attitudes toward Workshop. The other eight items related to participants' opinions about the training program and its content. Scores for these items are shown in Table 8.

Table 8. Item Scores on Opinion Inventory Items Related to Workshop.

Item	Item Mean
I believe I have a clear understanding of the nature of decisions.	3.9
SIS data are helpful in evaluating school programs.	4.2
SIS data are a valuable means of assessing educational needs.	4.1
I believe I have a good working knowledge of the School Information System.	3.5
SIS is helpful to administrators in goal setting.	4.2
This workshop has been useful.	4.3
I don't think many of the participants benefitted from this workshop.	4.1
Central office personnel need more training programs like this one.	4.2

Again, the overall picture is definitely positive. Participants apparently believed that they had benefitted from the program and felt that their understanding of SIS had been improved as a result of the Workshop.

CONCLUSIONS

The results of the cognitive and affective evaluation suggest several conclusions about the SIS training program for Education Center personnel.

1. The two-day workshop appears to have achieved success comparable to that of the August program for principals and assistant principals. Cognitive instruments administered before and after the workshop indicate knowledge gains among nearly all participants. An attitude scale used at the end of the program showed highly favorable feelings in workshop-related areas.

2. Smallest gains in measured knowledge occurred in the area of goal setting and problem identification. Possibly because of increased item difficulty, post-test percentages of correct response declined on several items in this area.

3. No single area emerges from the evaluation results as most important for future inservice training. Despite the decline in the goal setting area, these post-test percentages compared favorably with those for program evaluation, survey use, and functional knowledge of SIS. The approach of the workshop in dealing briefly with several major areas apparently served to supply some general deficiencies in the knowledge necessary to use SIS effectively.

4. Attitudes toward topics related to workshop content and goals appear rather uniformly positive. Items in three categories, SIS, Using Evaluative Data, and the Workshop, produced consistent mean scores. Participants generally agreed with favorable statements and disagreed with unfavorable statements.

RECOMMENDATIONS

Several recommendations follow logically from the conclusions. These relate to both purposes toward which evaluation of the program was addressed: identification of inservice needs and assessment of acceptance and understanding.

1. The general success of the program leads to the recommendation that additional training programs of this type be considered. Effective professional development depends on the nourishment of inservice training. Increasing the ability of administrators and supervisors to use the resources they have available is an important part of this training. The SIS training programs should therefore be viewed as prototypes for systematic efforts of this kind.

2. Because there was no single cognitive or affective area that appeared most in need of inservice attention, future SIS training among these same participants should focus on application to specific areas of educational decision making. Working with various subgroups of decision makers who now have the desire and knowledge necessary to use SIS, it will be possible to become increasingly specific about its application.

3. At the same time, the cognitive and attitudinal gains achieved through the workshop must be preserved. This can perhaps best be done by consistently emphasizing the service function of SIS. As faith in the system as a valuable means of improving the quality of educational decisions is reinforced, administrators will come to use the data more frequently and more effectively.

4. Finally, as SIS becomes institutionalized, provision should be made to orient new and aspiring administrators to the system. One means of achieving this would be to plan a seminar to be offered every two years. Essential content could correspond closely to that of the training program.

Prepared by:

Joseph L. Felix
Program Research & Design
December 13, 1972

APPENDIX D

Evaluation Instrument

SUPERVISORS TRAINING SESSION
3/23/73

INTRODUCTION: Please respond to the following items pertaining to my presentation today by checking the appropriate box which best describes how you feel.

PRESENTER'S VOICE:
- ☐ Too Loud
- ☐ About Right
- ☐ Too Soft

RATE OF TALKING:
- ☐ Too Fast
- ☐ About Right
- ☐ Too Slow

ROLE PLAY SESSION:
- ☐ Excellent
- ☐ Good
- ☐ Poor

MATERIALS:
- ☐ Excellent
- ☐ Good
- ☐ Poor

DID YOUR INSTRUCTOR(S):
- ☐ Motivate You
- ☐ Turn You Off

DID YOUR INSTRUCTOR(S):
- ☐ Give You Clear Direction
- ☐ Confuse You
- ☐ Do Nothing

OVERALL ASSESSMENT OF THE SESSION:
- ☐ Good
- ☐ Fair
- ☐ Poor

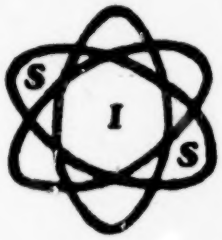
ANY OTHER GENERAL COMMENT(S): (Use reverse side if necessary)

PLEASE RETURN TO BERNARD BARBADORA

APPENDIX E

Evaluation Instrument

School Information System



CINCINNATI PUBLIC SCHOOLS
Program Research and Design
230 East Ninth Street
Cincinnati, Ohio 45202
ESEA Title III Project

M E M O R A N D U M

DATE: April 16, 1973
TO: Principal Addressed
FROM: Arthur Tebbutt, Evaluator, School Information System
RE: SIS Evaluation

The School Information System is coming close to its end under ESEA Title III. The project staff is expected to report on how well objectives were accomplished. For this, you play a vital role.

Since we have already received all the Title III money possible, there is no need to "snow" anybody with this. So please be honest--and be assured that the results will be used purely for assessing the project. Your name is needed only so I can bug non-returners. To repeat, you have my word that this is in no way an attempt to evaluate your responsiveness to the project. Results will be grouped and used to modify SIS in the future.

AVT:bsm

Enc.

PLEASE MAIL BACK NO LATER THAN APRIL 23 TO ART TEBBUTT, 3d FLOOR, EDUCATION CENTER

FEEDBACK FROM PRINCIPALS ON SIS

The following is designed to take little of your time, but you are encouraged to add whatever comments might help to fully evaluate SIS. Please circle answers.

1. In general, how well do you understand SIS reports?

   Very well Rather well Rather little Very little

   Comment: _____

2. How often do you tend to use SIS reports?

   Daily Weekly Monthly Annually

   Comment: _____

3. In terms of the following uses, how much do you refer to the reports?

   a) to answer staff questions: . . . . . A lot Somewhat A little Not at all
   b) to answer parent questions: . . . . A lot Somewhat A little Not at all
   c) for discussion in staff meetings: . . A lot Somewhat A little Not at all
   d) for discussion in community meetings: A lot Somewhat A little Not at all
   e) to assess needs or develop goals for your school: . . . . . A lot Somewhat A little Not at all
   f) to evaluate aspects of your school: . A lot Somewhat A little Not at all
   g) other _____ . . . A lot Somewhat A little Not at all

4. Please rank each SIS report in terms of interest for you.

   a) Exceptional Characteristics . . . . None Low Medium High
   b) Variable Printout. . . . . None Low Medium High
   c) Factor Stanine . . . . . None Low Medium High
   d) Variable Stanine . . . . . None Low Medium High
   e) Student Survey . . . . . None Low Medium High
   f) Teacher Survey . . . . . None Low Medium High
   g) Parent Survey . . . . . None Low Medium High
   h) Goal Survey. . . . . None Low Medium High
   i) Trend Report . . . . . None Low Medium High
   j) Achievement Forecast . . . . . None Low Medium High

5. What would you like SIS to emphasize next year?

   Shorter or fewer reports More training for users

   More help with data usage Other _____

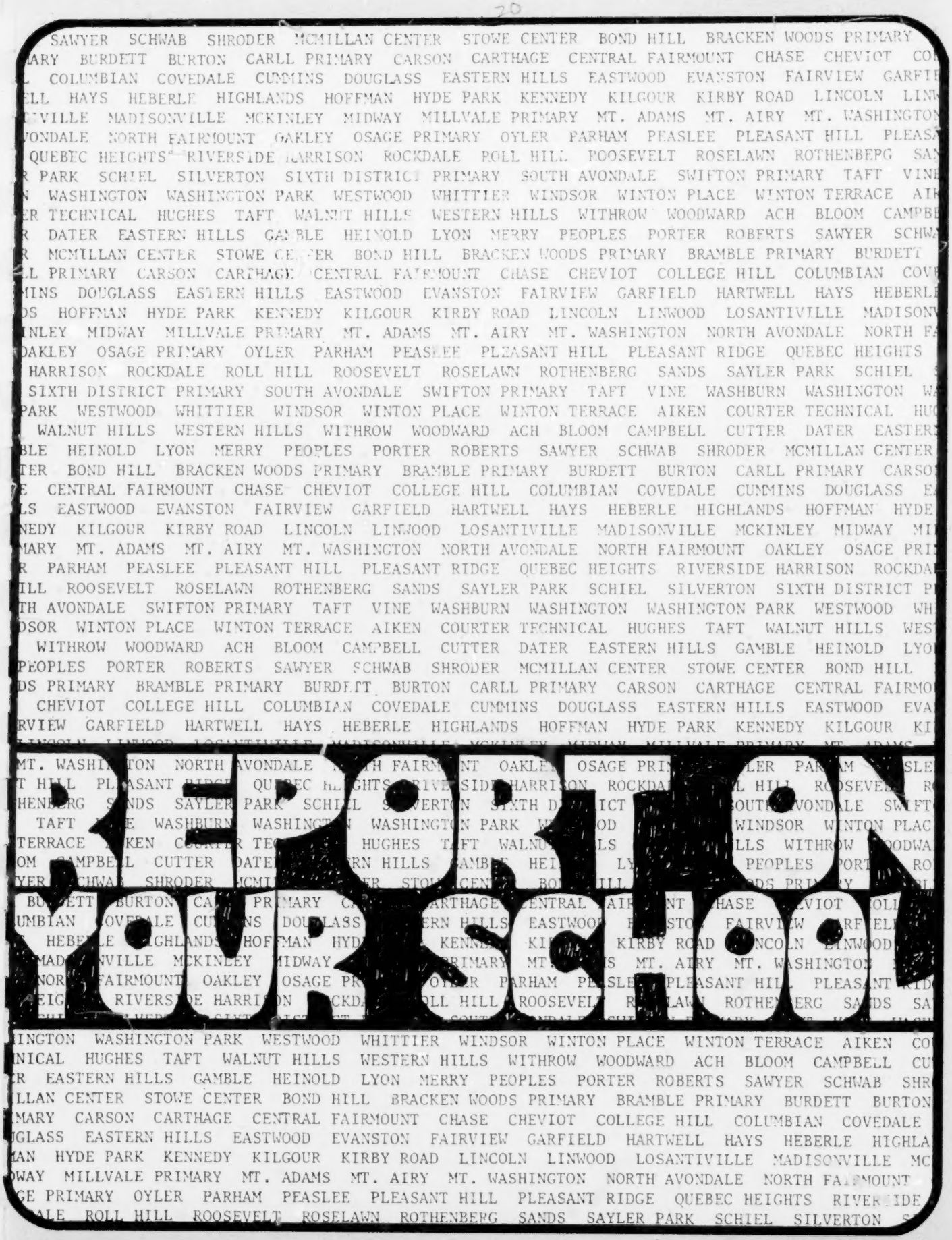
6. Finally, feel free to express in your own words what you think of SIS.

_____

_____

APPENDIX F

Report On Your School


REPORTING
YOURSELF

REPORT ON

AN INFORMATION REPORT PREPARED FOR

COVEDALE SCHOOL

Clifford Franklin, Principal

INTR

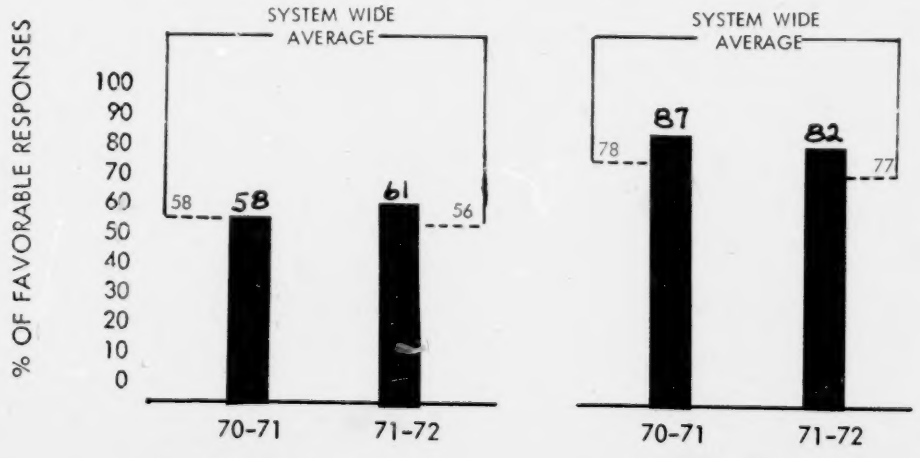
stude
the rep

Cincin

WHAT DO STUDENTS, PARENTS, AND TEACHERS FEEL TH/

STUDENTS	PERCENT RESPONDING	PARENTS
Job Training	61%	Improveme
Improvement of Basic Skills	56	Citizenshi
Understanding Other People	54	Character
Talent Development	40	Self-Dev

WHAT ARE STUDENTS LIKE IN YOUR SCHOOL?



OUR SCHOOL

ON . . .

his is a report on the public school in your area. It includes information about educational goals, cteristics, community characteristics, and student achievement. To show changes or possible trends, overs two school years, 1970-71 and 1971-72.

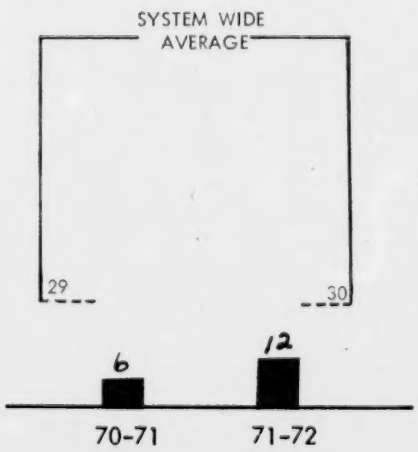
st of the information is shown in graphic form, comparing your school with the average for all ublic schools. Standardized test results, though, are compared to national averages.

OOLS SHOULD EMPHASIZE?

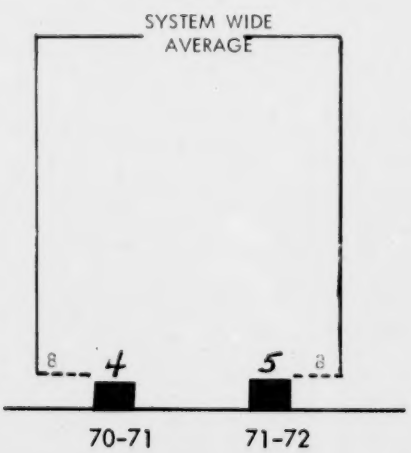
	PERCENT RESPONDING
asic Skills	76%
	52
ing	50
	49

TEACHERS	PERCENT RESPONDING
Improvement of Basic Skills	75%
Character Building	62
Self-Development	58
Citizenship	50

CONFIDENCE IN ABILITY TO SUCCEED IN SCHOOL

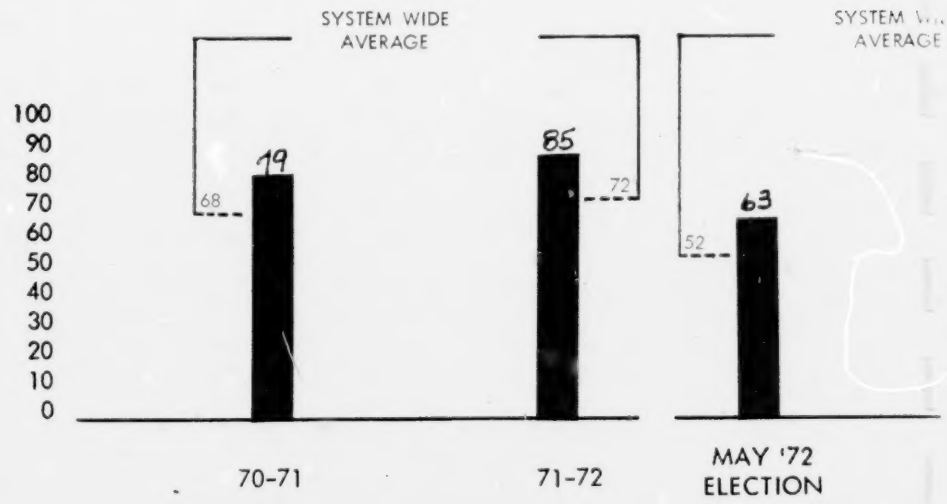


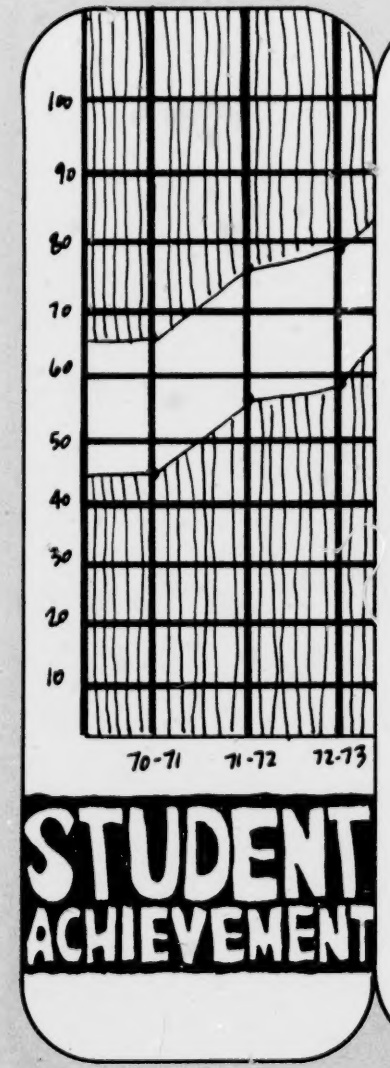
% OF STUDENTS TRANSFERRING IN OR OUT OF YOUR SCHOOL



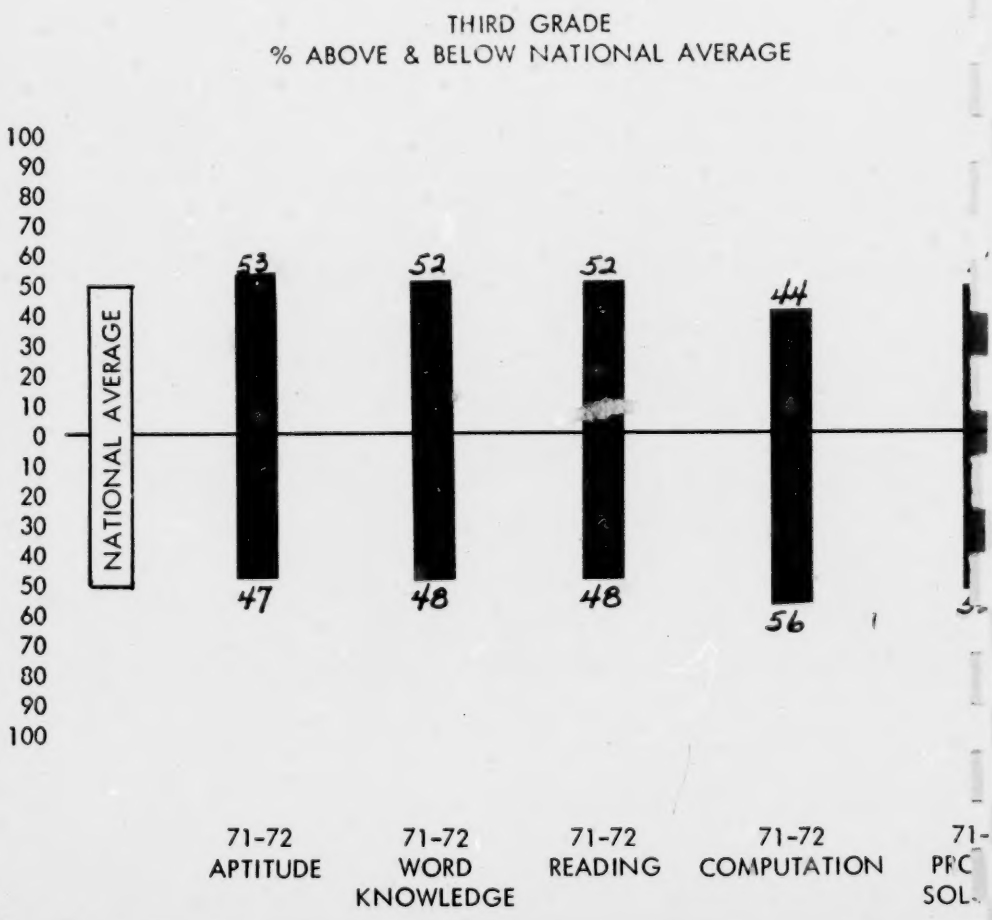
% OF STUDENTS ABSENT PER DAY AT YOUR SCHOOL

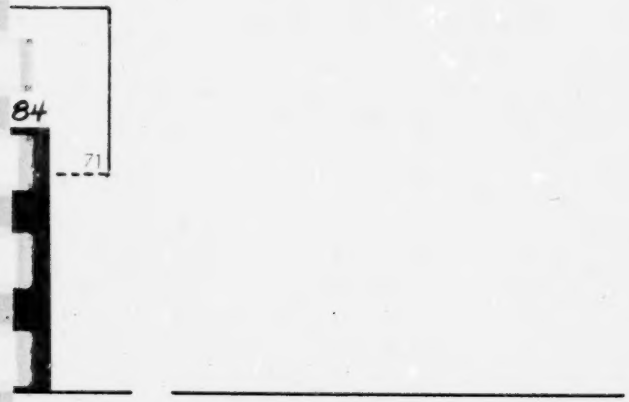
WHAT IS YOUR SCHOOL COMMUNITY LIKE?



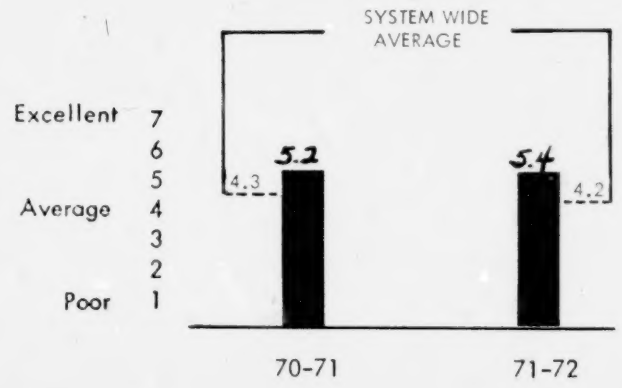


HOW WELL ARE STUDENTS ACHIEVING IN YOUR SCHOOL?



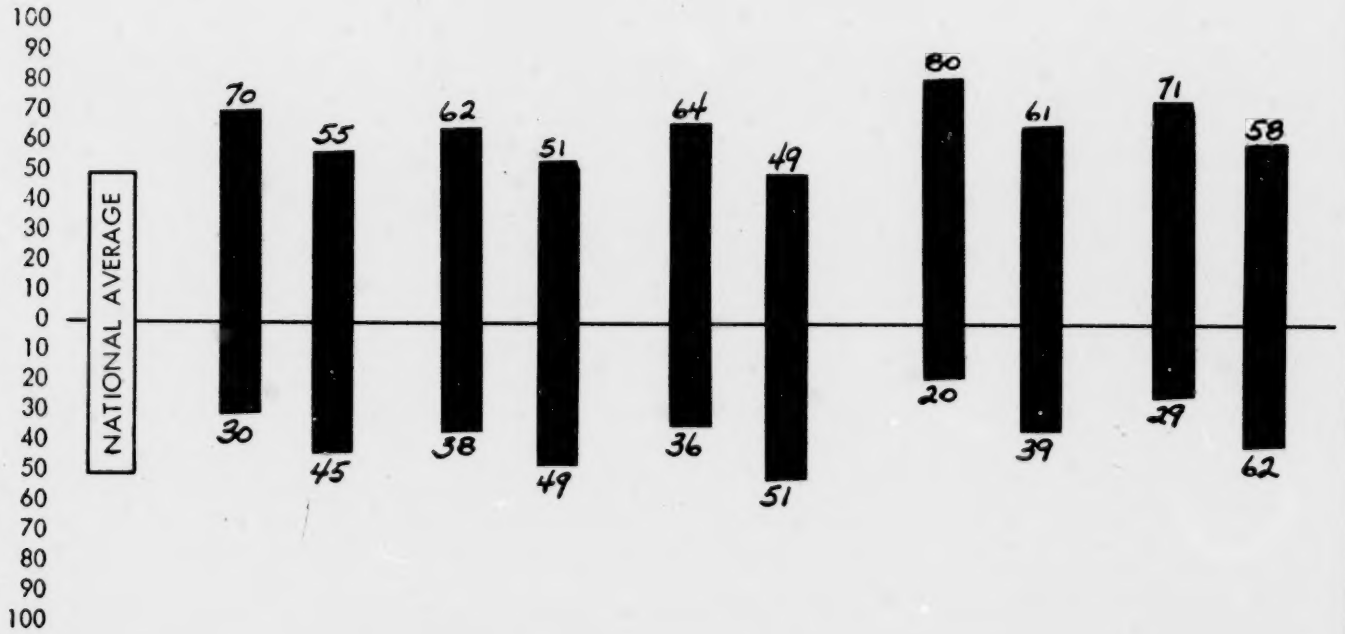


HOW IS THE STAFF MORALE?



STAFF MORALE

SIXTH GRADE
% ABOVE & BELOW NATIONAL AVERAGE



70-71 71-72 APTITUDE

70-71 71-72 WORD KNOWLEDGE

70-71 71-72 READING

70-71 71-72 COMPUTATION

70-71 71-72 PROBLEM SOLVING

A MESSAGE FROM THE SUPERINTENDENT

The Cincinnati Public Schools try to serve the educational needs of almost 80,000 pupils. We attempt to accomplish our mission with the highest degree of quality that is possible with the resources available. Ultimately, it is the citizens of Cincinnati who judge how well the school system has done and, more important, where and how the system can improve services to school children.

In order for you, the citizens of our community, to make sound judgments, you need basic information. REPORT ON YOUR SCHOOL is our attempt at giving you such information; it is our report card to you. We have selected information we believe would be of greatest interest to you. If you want additional information, the principal of your area school will be happy to respond to your needs.

This release is one of two reports describing our schools. While this report focuses on an individual school, the second will describe the entire school system. To be most effective, this report should be presented and discussed at local school-community meetings under the leadership of the school principal. At such meetings, citizens can have the opportunity to seek clarification of the information presented, ask for additional information, and express their views on what they perceive as the primary goals toward which their school should be striving.

The Cincinnati Public Schools are committed to a policy of citizens' having a right to know about their schools. The school system is also committed to a policy of seeking active involvement of its citizens in the decisions which affect the education of their children. It is our hope that this report will lead to the accomplishment of both goals. I will appreciate your comments concerning this report.

Donald R. Waldrip

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Donald R. Waldrip
Superintendent of Schools

Prepared by:

Division of Research and Development
Cincinnati Public Schools
April, 1973